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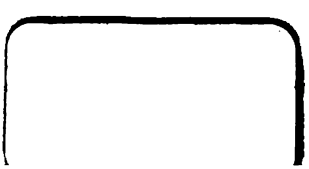

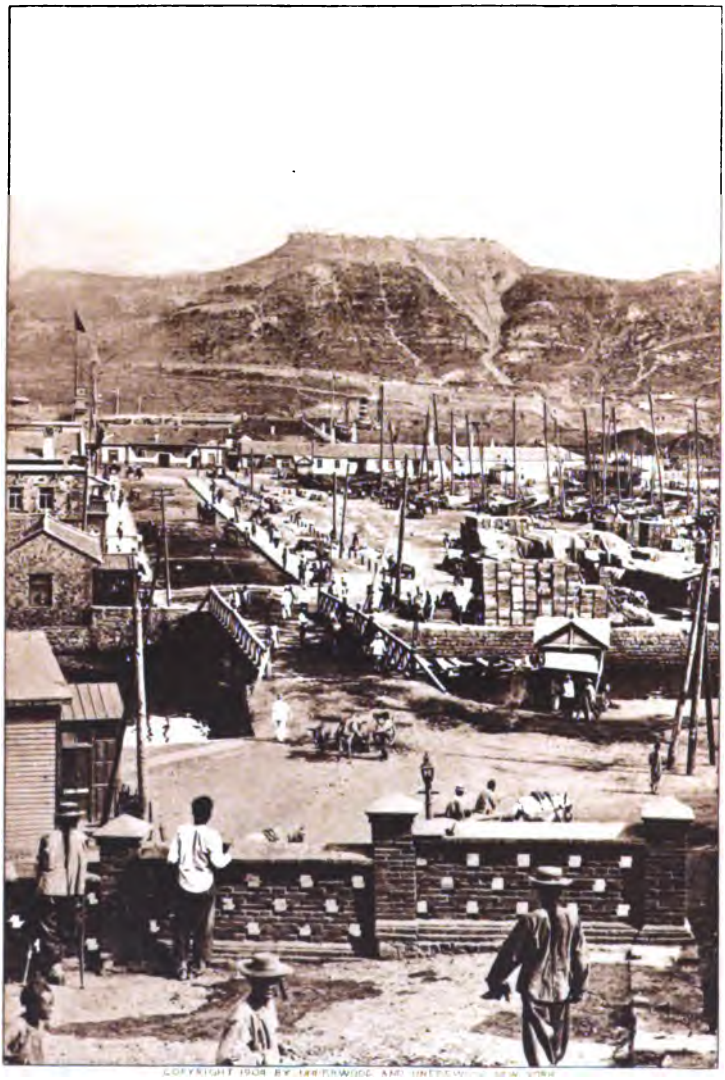

THE FORTIFIED HEIGHTS OF PORT-ARTHUR

NEW STANDARD EDITION

THE WORLD'S GREAT EVENTS

AN INDEXED HISTORY OF THE WORLD FROM EARLIEST TIMES TO THE PRESENT DAY

BY

GREAT HISTORIANS

EDITED BY

ESTHER SINGLETON

EDITOR OF "THE STORY OF THE UNIVERSE," "TURRETS, TOWERS AND TEMPLES," "ROMANTIC CASTLES AND PALACES," "WONDERS OF NATURE," ETC.

ILLUSTRATED

VOLUME EIGHT

FROM A. D. 1899 TO A. D. 1906

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Showing the Culebra Cut and the Three Locks at Gatun

VESUVIUS IN ERUPTION

From a photograph taken at the beginning of the eruption

THE PEACE CONFERENCE

(A.D. 1899)

ELEONORE D'ESTERRE-KEELING

"We are making a page of history; let us see to it that we make it well!"

THESE words were spoken lately by one of the ninety-eight delegates who, sent by twenty-six States, met at The Hague on May 18 to form the greatest Conference of the century, and the speaker nowise overestimated the importance of his mission. That page of history, which he helped to make, might be written in letters of gold.

A page of history.

For the last quarter of a century the nations of the world have been devoting all their ingenuity to the invention and perfection of means of destruction, with the result that a point at last was reached which meant that the next great war must terminate in the ruin of one combatant and the annihilation of the other.

Such a state of things was more than the most belligerent of Powers could contemplate with equanimity. Where was it all to end, and who would be the first to cry, "Hold—enough!"

The answer came from the least expected quarter.

The foreign ambassadors to the Court of St. Petersburg, when paying their weekly visit, on August 28th of last year, were handed by Count Muravieff, the Minister for Foreign Affairs, a printed document which caused them no little surprise. This document has since become famous as the Tsar's Rescript. It contained an invitation to all the Powers who were represented in the Russian capital to hold a Conference to discuss the possibility of putting "some limit to the increasing armaments, and to find a means of averting the calamities which threaten the whole world." At the same time the Tsar's circular pointed out that—

The Tsar's Rescript.

"The ever-increasing financial burdens attack public prosperity at its very roots. The physical and intellectual strength of the people, labor and capital are diverted for the greater part from their natural application and wasted unproductively. Hundreds of millions are spent to obtain frightful weapons of destruction, which, while being regarded to-day as the latest inventions of science, are destined to-morrow to be rendered obsolete by some new discovery. National culture, economical progress, and the production of wealth are either paralyzed or turned into false channels of development. Therefore the more the armaments of each Power increase, the

less they answer to the purposes and intentions of the Governments. Economic disturbances are caused in great measure by this system of extraordinary armaments, and the danger lying in the accumulation of war material renders the armed peace of to-day a crushing burden more and more difficult to bear."

Of the Conference which he proposed should be held, the Tsar went on to say:

"It would be a happy augury for the opening century. It would powerfully concentrate the efforts of all States which sincerely wish to see the triumph of the grand idea of universal peace over the elements of trouble and discord."

The comment of the London *Times*.

This paper was printed in the *Times* of August 29, 1898, and a comment upon it in a leader of the same journal is worth quoting:

"The state paper which Count Muravieff, by direct order of the Tsar, has addressed to the representatives of the Powers accredited to the Court of St. Petersburg, is a very remarkable and most unexpected document. On the eve of inaugurating a memorial to his grandfather as the Tsar Liberator, the present Autocrat of all the Russias seizes the opportunity to appeal to the civilized world in the still more lofty capacity of the Tsar Peacemaker. Count Muravieff's note, in which the views and aspirations of his master are expounded, breathes a spirit of generous—perhaps, indeed, of almost quixotic—humanity, a spirit with which

we have long been familiar in the effusions of visionaries and enthusiasts, but have been too seldom privileged to find in the utterances of great sovereigns and responsible statesmen. Never perhaps in modern history have the aspirations which good men in all ages have regarded as at once ideal and unattainable found so responsive an echo in the counsels of one of the greatest and most powerful of the world's rulers."

The second circular.

The States to which the Rescript had been addressed having respectfully, if incredulously, expressed their desire for further information as to the proposed Conference, on January 11, Count Muravieff sent out a second circular, in which the points to be discussed were placed under eight headings, as follows:

Special points for consideration.

"1. An agreement not to increase military and naval forces for a fixed period; also not to increase the corresponding War Budgets; to endeavor to find means for reducing these forces and their Budgets in the future.

"2. To interdict the use of any kind of new weapon or explosive, or any new powder more powerful than that which is at present in use for rifles and cannon.

"3. To restrict the use in war of existing explosives of terrible force, and also to forbid the throwing of any kind of explosives from balloons or by any analogous means.

"4. To forbid the use of submarine torpedo

boats or plungers, and any other similar engines of destruction, in naval warfare; to undertake not to construct vessels with rams.

"5. To apply to naval warfare the stipulations of the Geneva Convention of 1864.

"6. The neutralization of ships and boats for saving those shipwrecked during and after naval battles.

"7. The revision of the Declaration concerning the laws and customs of war elaborated in 1874 by the Conference of Brussels, which remains unratified to this day.

"8. To accept in principle the employment of good offices in mediation and optional arbitration in cases which lend themselves to such means in order to prevent armed conflict between nations; an understanding on the subject of their mode of application and the establishment of some uniform practice in making use of them."

On January 17, the *Times* in a leading article expressed its opinion of this development as follows:

General criticism of the Rescript.

"This document in a certain measure meets the wish expressed by Lord Salisbury in his despatch of October 24, for 'some indication of the special points to which the attention of the Conference is to be directed.' We now know what these points are to be, and the knowledge, we are afraid, can but confirm the view generally held by men of sense and expe-

rience in affairs as to the Utopian character of the whole design."

The opinion of the *Times* was by no means singular. The Tsar's proposal was discussed all over the civilized world, and everywhere the unpractical character of the scheme was condemned. Very much of the doubt inspired by it was due to the over-emphasis given in men's minds to point 1, which deals with the restriction of armaments. Had Count Muravieff's circular consisted of this point alone the failure of the proposed Conference would have been a foregone conclusion, but the other seven points offered a more hopeful prospect, and to them the success of the undertaking is wholly due.

With misgivings in their hearts, the delegates at length met at The Hague, where they were welcomed by the young Queen of the Netherlands, who placed at their disposal her beautiful summer palace, known as the "House in the Wood."

The "House in the Wood."

A more favorable spot could scarcely have been chosen for deliberations which were destined to last over two months in the hottest part of the year. For the English, French, and German delegates, The Hague is as convenient a meeting-place as could well be devised, and the close proximity of Scheveningen, one of the most delightful of seaside watering-places, enabled the delegates to combine the pleasantest of holidays with the exe-

cution of their business duties. Many of the members were accompanied by their families, and what with receptions by Queen Wilhelmina, and entertainments at the British Embassy, the Kurhaus at Scheveningen, and the temporary residences of the leaders of the Conference, ample provision was made against the dulness which is proverbially known to accompany all work and no play.

Novelty of the situation.

The situation indeed was so novel, and so little was expected to come of the proposed deliberations, that we can scarcely wonder at the question put by an American paper to one of its Dutch correspondents: "Is the Conference at The Hague anything else than a huge international junketing picnic party?"

Slowly, but surely, things began to take shape. It was seen that the Tsar's proposal, far from being confined to disarmament, was based on three distinct ideas, which might be roughly classed as the Means of War, the Horrors of War, and the Prevention of War. Strange to say, only one of the eight points in the Muravieff circular, and that the last one concerned itself with the prevention of war. As soon as this fact had become clear to the delegates to The Hague, they began to see their way.

Division of the work.

Their work was then divided into three sections. To the first section was given the discussion of points 1 to 4 of the Muravieff circular, dealing with armaments; and this section was again divided into two sub-

The chief officers.

sections—military and naval—the President being M. Beernaert, the Belgian Minister of Finance and President of the Chamber.

The second section undertook points 3 to 7, which referred to Rules of War, and here again two sub-sections devoted themselves respectively to the consideration of the Geneva Convention and of the Brussels Conference. M. Martens was nominated President of this section, and a better choice could not have been made. M. Martens is a Russian and a great linguist. He is an experienced diplomatist, and his knowledge of international law is so profound as to have gained for him the title of Chief-Justice of Europe. The third section, to which the important last clause of the Muravieff circular was confided, has considered the possibilities of Arbitration. The difficult and delicate position of President of this section was conferred on M. Bourgeois, the ex-Prime Minister of France; the Hon. Presidents being Sir Julian Pauncefote and Count Nigra, the chief Italian delegate.

The President of the whole Conference was M. de Staal, who has been Russian Ambassador to the Court of St. James's since 1884.

The final document.

The *Acte final* was drawn up and presented to the delegates just before the last sitting, on July 29. Its principal contents are the three conventions relating to Arbitration (which here comes first), to the Rules of War, and to the Geneva Convention. The first of these

was signed at once by sixteen States; those which abstained from signing being Germany, Austria-Hungary, China, Great Britain, Italy, Japan, Luxemburg, Servia, Switzerland, and Turkey. The second and third Conventions were signed by fifteen States, the abstentions being the same as in the preceding case, with the addition of Portugal.

The delegates parted with mutual expressions of encouragement and goodwill, M. de Staal, as President of the Conference, concluding his last speech with the words: "For myself, who have arrived at the term of my career and decline of my life, I consider it as a supreme consolation to have been able to witness the advent of new prospects for the welfare of humanity, and to have been able to cast a glance into the brightness of the future." The President's farewell address.

THE BATTLE OF ELANDSLAAGTE

(A.D. 1899)

G. W. STEEVENS

FROM a billow of the rolling veldt we looked back, and black columns were coming up behind us.

Along the road from Ladysmith moved cavalry and guns. Along the railway line to right of it crept trains—one, two, three of them—packed with khaki, bristling with the rifles of infantry. We knew that we should fight before nightfall.

Advance of the columns.

Major-General French, who commanded, had been out from before daybreak with the Imperial Light Horse and the battery of the Natal Volunteer Artillery reconnoitring toward Elandslaagte. The armored train—slate-color plated engine, a slate-color plated loop-holed cattle-truck before and behind an open truck with a Maxim at the tail of all—puffed along on his right. Elandslaagte is a little village and railway station seventeen miles northeast of Ladysmith, where two days before the Boers had blown up a culvert and captured a train. That cut our direct com-

The armored train.

munication with the force at Dundee. Moreover, it was known that the Free State commandoes were massing to the northwest of Ladysmith and the Transvaalers to attack Dundee again. On all grounds it was desirable to smash the Elandslaagte lot while they were still weak and alone.

The reconnaissance stole forward until it came in sight of the little blue-roofed village and the little red, tree-girt station. It was occupied. The Natal battery unlimbered and opened fire. A round or two—and then suddenly came a flash from a kopje two thousand yards beyond the station on the right. The Boer guns! And the next thing was the hissing shriek of a shell—and plump it dropped, just under one of the Natal limbers. By luck it did not burst; but if the Boer ammunition contractor was suspect, it was plain that the Boer artillerist could lay a gun. Plump: plump: they came right into the battery; down went a horse; over went an ammunition-wagon. At that range the Volunteers' little, old 7-pounders were pea-shooters; you might as well have spat at the enemy. The guns limbered up and were off. Next came the vicious *phutt!* of a bursting shell not fifty yards from the armored train—and the armored train was puffing back for its life. Everybody went back half-a-dozen miles on the Ladysmith road to Modder Spruit Station. The reconnaissance.

The men on reconnaissance duty retired, as

is their business. They had discovered that the enemy had guns and meant fighting. Lest he should follow, they sent out from Ladysmith, about nine in the morning, half a battalion apiece of the Devonshire and Manchester regiments by train; and the 42d Field Battery, with a squadron of the 5th Dragoon Guards by road. They arrived, and there fell on us the common lot of reconnaissances. We dismounted, loosened girths, ate tinned meat, and wondered what we should do next. We were on a billow of veldt that heaved across the valley; up it ran, road and rail; on the left rose tiers of hills, in front a huge green hill blocked our view, with a tangle of other hills crowding behind to peep over its shoulders. On the right, across the line, were meadows; up from them rose a wall of red-brown kopje; up over that a wall of grass-green veldt; over that was the enemy. We ate and sat and wondered what we should do next. Presently we saw the troopers mounting and the trains getting up steam; we mounted; and scouts, advance-guard, flanking patrols—everybody crept slowly, slowly, cautiously forward. Then, about half-past two, we turned and beheld the columns coming up behind us. The 21st Field Battery, the 5th Lancers, the Natal Mounted Volunteers on the road; the other half of the Devons and half the Gordon Highlanders on the trains —total, with what we had, say, something

The enemy means fighting.

Arrival of the columns.

short of 3,000 men and eighteen guns. It was battle!

The trains drew up and vomited khaki into the meadow. The mass separated and ordered itself. A line of little dots began to draw across it; a thicker line of dots followed; a continuous line followed them, then other lines, then a mass of khaki topping a dark foundation—the kilts of the Highlanders. From our billow we could not see them move; but the green on the side of the line grew broader, and the green between them and the kopje grew narrower. Now the first dots were at the base—now hardly discernible on the brown hill flanks. Presently, the second line of dots was at the base. Then the third line and the second was lost on the brown, and the third—where? There, bold on the sky-line. Away on their right, round the hill, stole the black column of the Imperial Light Horse. The hill was crowned, was turned—but where were the Bo— The hill is turned.

A hop, a splutter, a rattle, and then a snarling roll of musketry broke on the question; not from the hill, but far on our left front, where the Dragoon Guards were scouting. On that the thunder of galloping orderlies and hoarse yells of command—advance!—in line!—wagon supply!—and with rattle and thunder the batteries tore past, wheeled, unlimbered as if they broke in halves. Then rattled and thundered the wagons, men gath-

ered round the guns like the groups round a patient in an operation. And the first gun barked death. And then, after all, it was a false alarm. At the first shell you could see through glasses mounted men scurrying up the slopes of the big, opposite hill; by the third they were gone. And then, as our guns still thudded—thud came the answer. Only where? Away, away on the right, from the green kopje over the brown one, where still struggled the reserves of our infantry.

The guns join the infantry.

Limbers! From halves the guns were whole again, and wheeled away over plowland to the railway. Down went a length of wire-fencing, and gun after gun leaped ringing over the metals, scoring the soft pasture beyond. We passed round the leftward edge of the brown hill and joined our infantry in a broad, green valley. The head of it was the second sky-line we had seen; beyond was a dip, a swell of kopje, a deep valley, and beyond that a small sugar-loaf kopje to the left and a long, hog-back one on the right—a saw of small ridges above, a harsh face below, freckled with innumerable bowlders. Below the small kopje were tents and wagons; from the leftward shoulder of the big one flashed once more the Boer guns.

The artillery duel.

This time the shell came. Faint whirr waxed presently to furious scream, and the white cloud flung itself on to the very line of our batteries unlimbering on the brow. Whirr

and scream—another dashed itself into the field between the guns and limbers. Another and another, only now they fell harmlessly behind the guns, seeking vainly for the wagons and teams which were drawn snugly away under a hillside on the right. Another and another—bursting now on the clear space in rear of the guns between our right and left infantry columns. All the infantry were lying down, so well folded in the ground that I could only see the Devons on the left. The Manchesters and Gordons on the right seemed to be swallowed by the veldt.

Then between the bangs of their artillery struck the hoarser bay of our own. Ball after ball of white smoke alighted on the kopje—the first at the base, the second over, the third jump on the Boer gun. By the fourth, the Boer gun flashed no more. Then our guns sent forth little white balloons of shrapnel, to right, to left, higher, lower, peppering the whole face. Now came rifle fire—a few reports, and then a roll like the ungreased wheels of a farm cart. The Imperial Light Horse was at work on the extreme right. And now, as the guns pealed faster and faster, we saw mounted men riding up the nearer swell of kopje and diving over the edge. Shrapnel followed; some dived and came up no more.

Peppering with shrapnel.

The guns limbered up and moved across to a nearer position toward the right. As they

moved, the Boer gun opened again—Lord, but the German gunners knew their business!—punctuating the intervals and distances of the pieces with scattering destruction. The third or fourth shell pitched clean into a laboring wagon with its double team of eight horses. It was full of shells. We held our breath for an explosion. But, when the smoke cleared, only the near wheeler was on his side, and the wagon had a wheel in the air. The batteries unlimbered and bayed again, and again the Boer guns were silent. Now for the attack.

A breathless moment.

The attack was to be made on their front and their left flank—along the hog-back of the big kopje. The Devons on our left formed for the front attack; the Manchesters went on the right, the Gordons edged out to the extreme rightward base, with the long, long bowlder-freckled face above them. The guns flung shrapnel across the valley; the watchful cavalry were in leash, straining toward the enemy's flanks. It was about a quarter to five, and it seemed curiously dark for the time of day.

The terrible rain.

No wonder—for, as the men moved forward before the enemy, the heavens were opened. From the eastern sky swept a sheer sheet of rain. With the first stabbing drops horses turned their heads away, trembling, and no whip or spur could bring them up to it. It drove through mackintoshes as if they were blotting paper. The air was filled with

hissing; underfoot you could see solid earth melting into mud; and mud flowing away in water. It blotted out hill and dale and enemy in one gray curtain of swooping water. You would have said that the heavens had opened to drown the wrath of men. And through it the guns still thundered and the khaki columns pushed doggedly on.

The infantry came among the bowlders and began to open out. The supports and reserves followed up. And then, in a twinkling, on the stone-pitted hill-face burst loose that other storm—the storm of lead, of blood, of death. The storm of death. In a twinkling the first line were down behind rocks firing fast, and the bullets came flicking round them. Men stopped and started, staggered and dropped limply as if the string were cut that held them upright. The line pushed on; the supports and reserves followed up. A colonel fell, shot in the arm; the regiment pushed on.

They came to a rocky ridge about twenty feet high. They clung to cover, firing, then The charge up the hill. rose, and were among the shrill bullets again. A major was left at the bottom of that ridge, with his pipe in his mouth and a Mauser bullet through his leg; his company pushed on. Down again, fire again, up again, and on! Another ridge won and passed—and only a more hellish hail of bullets beyond it. More men down, more men pushed into the firing-line—more death-piping bullets than ever.

The air was a sieve of them; they beat on the bowlders like a million hammers; they tore the turf like a harrow.

Another ridge crowned, another welcoming, whistling gust of perdition, more men down, more pushed into the firing-line. Half the officers were down; the men puffed and stumbled on. Another ridge—God! Would this cursed hill never end? It was sown with bleeding and dead behind; it was edged with stinging fire before. God! Would it never end? On, and get to the end of it! And now it was surely the end. The merry bugles rang out like cock-crow on a fine morning. The pipes shrieked blood and the lust of glorious death. Fix bayonets! Staff officers rushed shouting from the rear, imploring, cajoling, cursing, slamming every man who could move into the line. Line—but it was a line no longer. It was a surging wave of men—Devons and Gordons, Manchester and Light Horse, all mixed, inextricably; subalterns commanding regiments, soldiers yelling advice, officers firing carbines, stumbling, leaping, killing, falling, all drunk with battle, shoving through hell to the throat of the enemy.

The ridges stormed.

And there beneath our feet was the Boer camp, and the last Boers galloping out of it. There also—thank Heaven, thank Heaven!—were squadrons of Lancers and Dragoon Guards storming in among them, shouting,

spearing, stamping them into the ground. Cease fire!

It was over—twelve hours of march, of reconnaissance, of waiting, of preparation, and half an hour of attack. But half an hour crammed with the life of half a lifetime. Success at last.

TELEGRAPHY WITHOUT WIRES

SILVANUS P. THOMPSON

TO communicate messages by telegraph between two places unconnected by any wire wherewith to convey the electric current sounds almost a mythical achievement. Yet this has been possible, over short distances, for some years. There is no "new telegraphy," as some journalists would have us believe. The only telegraphy in the matter is the old telegraphy of dots and dashes. Neither is there anything new in the circumstance of dispensing with the metallic communication afforded by a line-wire. This only is new:—that by improvements in the details of known apparatus it is now possible thus to communicate over distances of miles where formerly the limit of range was to be measured only in as many bow-shots. Nor is this all that may yet be accomplished. The recently announced feat of telegraphing without wires* across the Bristol Channel—a distance of nearly nine miles—seems a small affair when compared with some of the unre-

No new telegraphy.

* This was written in 1897.

hearsed and unintended feats of electric transmission. It is barely ten years ago that one night, through an accident to Mr. Ferranti's electric lighting machinery at Deptford, the whole of the railway telegraphs over South London were for some hours completely disorganized by persistent and unauthorized signals, the stray currents being traced by their telegraphic effects not only into the Midland Countries, but even across the sea at Paris. If these things were possible once, and without prearrangement, it was obvious that by proper forethought and due expenditure of money on the requisite machinery a telegraph without wires might be established between London and Paris, or for that matter between any two places.

Stray currents.

When telegraphy first became an established fact it was supposed that two wires were necessary for communication, one to carry the current on its outward journey, the other to serve as a return path, thus constituting together a closed metallic circuit. But more than half a century ago Steinheil of Munich discovered that the earth itself conducted sufficiently well to serve as a common return for any number of separate outgoing circuits; since which time telegraphy with single lines has been the universal rule.

Steinheil's discovery.

For telegraphy without wires several methods are possible, but they may be grouped under three heads—namely, conduc-

tion through earth or water, magnetic induction, and true electric or electro-magnetic waves. The first of these it is which has been known for long. A good many years ago experimental communication was thus successfully tried between the Isle of Wight and the Solent, without any connecting cable. Two stations were chosen, some miles apart, on each shore; and a line was erected along each shore, each line terminating at both ends in the sea. If now a message was transmitted along the Hampshire line, the current, instead of returning simply back through the earth, spread through earth and sea, a measurable fraction of it finding its way through sea to the submerged end of the Isle of Wight line, and along that line till it entered the sea again to complete its return course to the starting-point. To telegraph thus by conduction through sea-water needs, however, a sufficient length of coast as a base-line on both sides; and experience shows that the requisite minimum length of base-line is about as great as the distance to be crossed. Hence this method is out of the question for communication to lighthouses like the Eddystone, though it has been successfully used by Mr. Preece to communicate with the Island of Mull during a temporary breakdown of the cable connecting that island to the mainland. Many instances might be given of similar communication by conduction through the soil or the sea. When

Conduction through sea-water.

telephones were used with single lines instead of proper metallic circuits, there were continual interferences from stray noises, chiefly consequent on earth conduction and leakage from other lines.

The second method, that of magnetic induction, is scarcely applicable over so wide a range; yet it is possible under certain circumstances. In some experiments by the postal authorities wires were laid out around two large square tracts of land in South Wales, each square constituting a separate closed circuit without any chance of leakage or earth conduction from one to the other. Yet signals made in one of the squares could be detected and read upon instruments in the other square, even though several hundred yards intervened between the two. In this case the magnetic "field" created by the currents in one circuit spread invisibly into the other circuit and induced corresponding currents therein. Magnetic induction.

The third method—that of electric waves—has lately received considerable public attention, though the discovery how to transmit electric waves and detect them at a distance was made by the late Professor Heinrich Hertz so far back as 1888. The waves are started by setting electric sparks to jump between a pair of metal balls attached to an apparatus called an oscillator or sender, which is simply a metallic conductor divided at the middle to provide a spark-gap. Improved forms of the Hertzian waves.

wave-emitter have been devised by Professor Righi of Bologna and by Professor Oliver Lodge of Liverpool, both of whom have labored long and well in developing scientifically the path thus pioneered by Hertz. Detectors of many kinds have been used for picking up the Hertzian waves at a distance. Foremost of these is the form used by Lodge, which is simply a glass tube containing some iron filings or metallic dust, connected with a small battery and a sensitive receiving instrument. This arrangement depends upon the earlier discovery by Branly that loose metal powders when exposed to electric waves change their properties temporarily, and from being almost perfect non-conductors become exceedingly good conductors of electric currents. Using such a detector, Lodge was able, at the British Association meeting at Oxford in 1894, to show the transmission of signals by electric waves from the Museum to the adjacent building of the Clarendon Laboratory, through several intervening stone walls, the detector being in connection with an electric bell or a sounder to make the signals audible. Still no large-scale experiments were carried out, mainly because of a want of sympathy between the officials of the telegraph service and the scientific experimenters. In the summer of 1896, there came to England a young Italo-Hibernian, Signor Marconi, with a project for signalling by electric waves on a

Branly's discovery.

Marconi's system.

closely similar plan. He uses a Righi transmitter and a modified Branly detector, consisting of very fine metallic particles inclosed in an exhausted glass tube of diminutive size. The detector is relayed on to a Morse telegraph sounder or writer, with sundry details of improvement, including a device originally suggested by Lodge for giving mechanical agitation to the detector after each time that it has operated. With this apparatus and the powerful co-operation of the Post-Office, Marconi succeeded on Salisbury Plain in sending signals across a space of two miles; and subsequently—when the apparatus was removed to the West country—from Penarth, near Cardiff, to Bream Down, near Weston-super-Mare, a distance of eight and three-quarters miles. Mr. Preece states that up to three miles the wave-method is not so successful as the conduction method with a suitable base-line, but beyond that distance the wave-method has undoubted superiority.

Superiority of the wave-theory.

On the occasion of the recent Royal Society Conversazione, Mr. Preece described Marconi's apparatus and exhibited it in operation; while in the Council Room, Dr. Alexander Muirhead showed Lodge's apparatus, operating for this occasion a Kelvin recorder, the transmitter (an ordinary Hertz-wave apparatus) being in another room, some eighty feet away. It is doubtless a great stride in practical progress to be able to signal to a distance

of nine miles;* but this is far from the limit that can be reached with properly designed apparatus. We are yet only at the beginning of the practical research. These electric waves travel with the speed of light. They are in fact simply gigantic light-waves of an invisible kind. But, unlike the ripples of ordinary light, they are not stopped by fogs or trees or buildings. We all know what splendid service Mance's heliograph, or telegraph for flashing signals by the sun's rays, did at Ekowa sixteen years ago. But Mance's heliograph can not work through fog or cloud, nor across a forest. The Hertz-wave telegraph is not obstructed by any such obstacle; and the expense of installing the sending and receiving apparatus is slight compared with the cost of a submarine cable. Hence a rapid development of its applications may be expected. It is but nine years since the discoveries of Hertz in this out-of-the-way region of abstract science put into our hands the means of creating electric waves. Hertz died all too soon to see the first-fruits of the germ which he planted. Now after nine years others enter in to reap the benefit of his discoveries, and to create financial schemes for exploiting the product of his brain. Let them not forget to acknowledge that the only real novelties in the whole thing are the Hertz-wave and the Branly-

Mance's heliograph.

* Expectations have since been amply justified, since wireless messages have already been sent across the Atlantic.—*Ed.*

Lodge detector, both of which were given freely and unpatented to the world.

[In 1900, the United States Senate ratifies the Samoan treaty. The Boer General Cronje surrenders to Lord Roberts; the British army occupies Bloemfontein; Pretoria surrenders to Lord Roberts, and Lord Roberts proclaims the Transvaal British territory. A British force is attacked near Dompoassi by the Ashantis; an International Exposition at Paris attracts 60,000,000 visitors; the allies capture the Taku forts in China; the Chinese attack the Legations at Peking. Baron von Ketteler, the German minister, is murdered, and the allies take Tien-tsin; a fire in Hoboken, N. J., destroys vessels and docks and other property to the amount of $10,000,000. King Humbert is assassinated at Monza and is succeeded by his son, Victor Emmanuel; the Duke of Abruzzi returns from a polar expedition, having reached 86° 33′ N. lat., the highest point yet discovered. A tornado in Galveston, Texas, destroys 7,000 lives and $30,000,000 in property. Prince Hohenlohe resigns the Chancellorship of the German Empire; a new Spanish Ministry is formed under General Azcarraga. The Cuban Constitutional Convention is opened in Havana.]

Cronje surrenders.

King Humbert assassinated.

THE BOXER MOVEMENT

(A.D. 1900)

SIR ROBERT HART

WE can not say we had no warning. Already in September, 1898, after the famous *coup* by which the reforming Emperor, Kwang Hsü, was relegated to the nothingness of harem life, and the well-known Empress Dowager, who had ruled the Empire through two minorities (Tung-Chih in the sixties and Kwang Hsü in the eighties), again came to the front, the attitude of Tung Fuh Hsiang's soldiers had disturbed the Legations, accentuated the possible insecurity of the foreign community, and brought guards to Peking, and in the autumn of the following year the Shanghai press called attention to the Boxer movement in Shantung—its genesis and aspirations, while the *Tien-tsin Times* was laughed at, in the spring of 1900, for its bold denunciations of the same movement and for its prophecies of the harm therefrom to come as the society's operations crossed the frontier and began to spread in Pecheli. In fact, if there was one cry to which our ears

The Empress Dowager's *coup*.

had grown so accustomed as to mind it less than our own heart-beats, it was this Chinese cry of "Wolf!" Rebellion was ever on the point of upsetting the dynasty—the government was always on its last legs—foreigners were to be exterminated on a given date—the powers were about to partition China—etc.: each year—nay, every month—the press or local rumor, Cassandra-like, foretold woe, and yet, barring a few episodes of various degrees of importance, the government went on as before. The last half of the Nineteenth Century saw the Taeping rebellion, the "Arrow" war, the Tien-tsin massacre, the Franco-Chinese misunderstanding, the war with Japan, and the surrender of Cochin-China, Burma, Kiao Chow, Port Arthur, Wei-Hai-Wei, Kwang Chow-wan, etc., to the foreigner—it also saw the rejection of Italy's Chekiang demands—and still life went on unchanged and the cry of Wolf grew more and more meaningless: so it was not surprising that many supposed the Boxer scare would fizzle out similarly and with a minimum of danger to either Chinese Government or foreign interests. At the same time some of us regarded the movement as very significant, but we did not expect it to become a danger before autumn: its earlier development was a genuine surprise.

Foreign aggression.

That it was patriotic in its origin and justifiable in much that it aimed at can not be

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questioned, and can not be too much insisted on, but, like other popular risings, its popular organization and formidable development and widespread growth made it more likely to lead than to follow, while the claims of the initiated to something like supernatural powers in the matters of movement and invulnerability, exhibited first before Prince Tuan and then before Emperor and Empress Dowager, won for it a standing and respect which placed it on a plane of its own and went far toward giving it a free hand for its operations. Something akin to hypnotism or mesmerism seems connected with Boxer initiation and action: the members bow to the southeast, recite certain mystical sentences, and then, with closed eyes, fall on their backs; after this they arise, eyes glazed and staring, possessed of the strength and agility of maniacs, mount trees and walls, and wield swords and spears in a way they are unable to at other times; semi-initiation is said to render the body impervious to cut or thrust, while the fully initiated fear neither shot nor shell; the various sub-chiefs are, of course, fully initiated, but the supreme chief is described as more gifted still —he sits in his hall, orders the doors to be opened, and while remaining there in the body, is said to be elsewhere in spirit, directing, controlling, suggesting, and achieving.

Supernatural powers of the Boxers.

Those of us who regarded the movement as likely to become serious and mischievous put

off the time of action to September: our calculations were wrong, for already in May it had spread from Shantung, was overrunning Pecheli, and was following the railway line from Pao-ting-foo, the provincial capital, toward Peking itself. Chapels were destroyed, converts were massacred, railway stations were wrecked, railway and telegraph lines were damaged, excitement was spreading and yet, although the state of the country all around grew more and more alarming, it still seemed to be a question whether the movement would roll back toward its source from Peking or take new shape there and gather new and onward impetus. Meantime, the Legations fortunately succeeded in getting up a few guards from the warships off Taku, so that there were from three to four hundred armed men in Peking for their protection—American, Austrian, British, French, Italian, Japanese, and Russian.

Growth of the movement.

From the end of May the air was full of rumors and alarms, and all were on the alert, ladies and children spending the nights at the British Legation for safety; but the movement was still regarded as a Boxer movement, and we could not allow ourselves to believe that the government would permit it to create disorder in Peking; much less that the troops would join it and its doings be accepted and approved of by the Chinese authorities: in fact, the troops appeared at one time to be op-

Rumors and alarms.

erating against the Boxers and protecting the Ma-chia-pu railway station from destruction, and thus helped to strengthen our old faith in the security of the capital; but to the eye of to-day that military movement was intended to obstruct the Admiral's force, and not to oppose the Boxers. On the 9th of June, the outlook was so threatening that the Customs and College people were called in from the scattered quarters; and from that date to the 20th all lived at the Inspectorate, and combined with their neighbors, Japanese, Austrians, and French, to keep watch day and night.

Note from the Yamen.

Up to the 20th of June we had only the Boxers to deal with, but on the 19th, we were surprised by a Circular Note from the Yamên (Chinese Foreign Office), stating that the foreign naval authorities at Tien-tsin were about to seize the Taku forts, and ordering Legations to quit Peking within twenty-four hours. The Legations replied, and represented to the Yamên that they knew nothing of the Taku occurrence—that they regretted any misunderstanding—and that they could not possibly quit, or make transport arrangements, on such short notice. A proposal to visit the Yamên in a body was set aside, but on the morning of the 20th Baron von Ketteler, the German Minister, attended by his interpreter, Mr. Cordes, set off for the Yamên alone: his colleagues advised him not to go, but he felt that, having announced his visit, he must pay

it. Ten minutes after he left the Legation, his Chinese outriders galloped back saying that he had been shot when going up the Ha-ta-mên Street. His interpreter, badly wounded, managed to escape to the Methodist Mission, and was thence taken back to the German Legation. It had previously been decided, in case of attack, to hold all the Legations as long as possible, but to fall back on the British Legation when necessary for united defence and a final stand; the order to quit Peking, and the seemingly official murder of a Minister, rather precipitated matters, and before the twenty-four hours' limit had expired (4 P.M., 20th of June) all the ladies and children were in the British Legation, and also the various foreign representatives.

Murder of Baron von Ketteler.

Up to the 20th of June we had—as already stated—only Boxers armed with sword and spear to fear, but on that day rifles began to be used, and soldiers fired them—notably men belonging to Tung Fuh Hsiang's Kan-suh command. Our longing for the appearance of Admiral Seymour grew intense, and night after night we buoyed ourselves up with calculations founded on the sound of heavy guns in the distance or the appearance of what experts pronounced to be search-lights in the sky: soon, however, we gave up all hope of the Admiral's party, but, supposing that the Taku forts had been taken on the 18th, we inferred that a few days later would see a

Soldiers attack the Legations.

large force marching from Tien-tsin for our relief, and that within a fortnight it would be with us—otherwise, why imperil us at Peking by such premature action at Taku?

The Legations besieged.

We were under fire from the 20th to the 25th of June, from the 28th of June to the 18th of July, from the 28th of July to the 2d of August, and from the 4th to the 14th of August: night and day rifle bullets, cannon balls, and Krupp shells had been poured into the various Legations from the gate in front of the Palace itself, from the very wall of the Imperial City, as well as from numerous nearer points around us, and the assailants on all sides were Chinese soldiers; whether the quiet of the 26th and 27th of June and 19th to 27th of July was or was not ordered by the government we can not say, but the firing during the other periods, close as we were to the Palace, must have been by the orders of the government; and it cost our small number over sixty killed and a hundred wounded! That somebody intervened for our semi-protection seems, however, probable: attacks were not made by such numbers as the government had at its disposal—they were never pushed home, but always ceased just when we feared they would succeed—and, had the force round us really attacked with thoroughness and determination, we could not have held out a week, perhaps not even a day; and so the explanation that there was some kind of protec-

Explanation of salvation.

tion—that somebody, probably a wise man who knew what the destruction of the Legations would cost Empire and Dynasty, intervened between the issue of the order for our destruction and the execution of it, and so kept the soldiery playing with us as cats do with mice, the continued and seemingly heavy firing telling the Palace how fiercely we were attacked and how stubbornly we defended ourselves, while its curiously half-hearted character not only gave us the chance to live through it, but also gave any relief forces time to come and extricate us, and thus avert the national calamity which the Palace in its pride and conceit ignored, but which some one in authority in his wisdom foresaw and in his discretion sought how to push aside.

The attack renewed.

On the 4th of August our assailants' rifles again began to be troublesome, and the list of killed and wounded was added to. On the 7th some additional barricades isolated us even more than ever, and at the same time despatches from the Yamên announced that Li Hung Chang was appointed to arrange matters by telegram with the various Foreign Offices. On the 8th the firing was lighter, and letters of condolence came from the Yamên communicating the news of the deaths of the King of Italy and the Duke of Edinburgh; but on the 9th heavy firing was resumed, and grew heavier and heavier until the 14th, the nights of the 12th and 13th being specially

Arrival of the Shansi contingent.

noisy, and the latter so threatening—one shell bursting in the Minister's bedroom—that the Jubilee bell summoned everybody to arms twice: our previous assailants had been withdrawn and the newly arrived Shansi contingent had taken their places armed with the very best repeating rifles and headed by a general who undertook to finish with us in five days, "leaving neither fowl nor dog." Their five days were ending on the 12th, and the general was at the barricades in person, encouraging his men; but, happily, part of the barricade gave way and exposed those behind it, who were at once shot by our people, the general himself falling to the rifle of a Customs volunteer, Mr. Bismark. Our position had been strengthened in every possible way, but the assailants were growing bolder, and the experiences of the 13th showed that they would probably rush it in overwhelming numbers the next attack. Fortunately for us, the morning of Thursday, the 14th, brought us the welcome sounds of the Maxims and guns of the relieving forces; and about 3 P.M. General Gazelee and General Chaffee were shaking hands with us.

Relief force arrives.

Significance of the event.

What precedes, as already explained, is not a chronicle—it is simply a note to give readers a bird's-eye view of the unprecedented occurrences of a Peking summer, and prepare the way for directing attention briefly to the future thereby foreshadowed: as for daily

details, they will be found in many quarters elsewhere from the reports and pens of many observers. The episode of to-day is not meaningless: it is the prelude to a century of change and the keynote of the future history of the Far East: the China of the year 2000 will be very different from the China of 1900! National sentiment is a constant factor which must be recognized, and not eliminated, when dealing with national facts, and the one feeling that is universal in China is pride in Chinese institutions and contempt for foreign: treaty intercourse has not altered this—if anything, it has deepened it, and the future will not be influenced by it. The first question now to be settled by the Treaty Powers is how to make peace—for China is at war with all, and what conditions to impose to safeguard the future—for the stipulations of the past have been set at defiance and obliterated. There would seem to be a choice between three courses—partition, change of dynasty, or patching up the Manchoo rule. That the future will have a "yellow" question—perhaps a "yellow" peril—to deal with is as certain as that the sun will shine to-morrow. How can its appearance be delayed, or combated, or by any action taken now turned into harmless channels?

How to make peace.

But what is this "Yellow Peril"? The Chinese, an intelligent, cultivated race, sober, industrious, and on their old lines civilized,

China's sources of wealth.

homogeneous in language, thought, and feeling, which numbers some four hundred millions, lives in its own ring fence, and covers a country which—made up of fertile land and teeming waters, with infinite variety of mountain and plain, hill and dale, and every kind of climate and condition—on its surface produces all that a people requires and in its bosom hides untold virgin wealth that has never yet been disturbed—this race, after thousands of years of haughty seclusion and exclusiveness, has been pushed by the force of circumstances and by the superior strength of assailants into treaty relations with the rest of the world, but regards that as a humiliation, sees no benefit accruing from it, and is looking forward to the day when it in turn will be strong enough to revert to its old life again and do away with foreign intercourse, interference, and intrusion. It has slept long, as we count sleep, but it is awake at last, and its every member is tingling with Chinese feeling—"China for the Chinese, and out with the foreigners!" The Boxer movement is doubtless the product of official inspiration, but it has taken hold of the popular imagination and will spread like wildfire all over the length and breadth of the country; it is, in short, a purely patriotic volunteer movement, and its object is to strengthen China—and for a Chinese programme. Its first experience has not been altogether a success as regards the

What the Boxer movement really is.

attainment through strength of proposed ends —the rooting up of foreign cults and the ejection of foreigners, but it is not a failure in respect of the feeler it put out—will volunteering work?—or as an experiment that would test ways and means and guide future choice: it has proved how to a man the people will respond to the call, and it has further demonstrated that the swords and spears to which the prudent official mind confined the initiated will not suffice, but must be supplemented or replaced by Mauser rifles and Krupp guns: the Boxer patriot of the future will possess the best weapons money can buy, and then the "Yellow Peril" will be beyond ignoring. Wên Hsiang, the celebrated Prime Minister of China during the minority of Tung Chih in the early sixties, often said: "You are all too anxious to awake us and start us on a new road, and you will do it; but you will all regret it, for, awaking and started, we shall go fast and far—further than you think—much further than you want." His words are very true.

The Yellow Peril.

The first doings of the Boxer patriots show that their plan of operations was on the one hand to destroy Christian converts and stamp out Christianity, and thus free China from the, in their eyes, corroding influence of a foreign cult, and, on the other,—not to hurt or kill, but—to terrify foreigners, frighten them out of the country, and thus free China

Motives of the Boxers.

from foreign trespass, contamination, and humiliation, and these are the objects which will be kept in view, worked up to, and in all probability accomplished—with other weapons in their hands—by the children or grandchildren of to-day's volunteers.

The Boxers of the future.

Twenty millions or more of Boxers, armed, drilled, disciplined, and animated by patriotic—if mistaken—motives, will make residence in China impossible for foreigners, will take back from foreigners everything foreigners have taken from China, will pay off old grudges with interest, and will carry the Chinese flag and Chinese arms into many a place that even fancy will not suggest to-day, thus preparing for the future upheavals and disasters never even dreamt of. In fifty years' time there will be millions of Boxers in serried ranks and war's panoply at the call of the Chinese Government: there is not the slightest doubt of that! And if the Chinese Government continues to exist, it will encourage—and it will be quite right to encourage, uphold and develop—this national Chinese movement: it bodes no good for the rest of the world, but China will be acting within its right, and will carry through the national programme.

The Hague Court.

[In 1901, The Hague Court of International Arbitration is organized. The first Territorial Legislature in Hawaii meets. A

Pan-American Exhibition is held at Buffalo and an International Exhibition in Glasgow. Santos-Dumont's airship sails around the Eiffel Tower. Prince Chun goes to Germany to express regret for the murder of Baron von Ketteler. President McKinley is shot at the Pan-American Exhibition in Buffalo on September 6, and dies on September 14, when President Roosevelt takes the oath of office. The Pan-American Congress is opened in the City of Mexico. The South Carolina and West Indian Exhibition is held in Charleston, S. C. Great Britain and the United States sign the Isthmian Canal treaty. In 1902, the Emperor and Empress Dowager of China re-enter Pekin. England and Japan form an alliance to preserve the integrity of China and Corea. An earthquake in Transcaucasia kills about 2,000 people. Prince Henry of Prussia visits the United States. China and Russia sign a convention at Peking, wherein Russia agrees to evacuate Manchuria. The first Congress of the Cuban Republic meets at Havana. An eruption of Mont La Soufrière, St. Vincent's, on May 7, destroys 2,000 persons, and on May 8 an eruption of Mont Pelée, Martinique, destroys St. Pierre and 30,000 inhabitants. T. Estrada Palma is inaugurated first President of Cuba; the Campanile at Venice falls. Mont Pelée is again in eruption (August 30-September 4), and more than 2,000 persons are killed. Lieutenant Peary travels to 84° 17′

President McKinley assassinated.

T. Estrada Palma first President of Cuba.

northwest of Cape Hecla. Stanley Spencer, the English aeronaut, sails his airship 30 miles over London. The Canadian-Australian cable, of 3,455 miles, from Vancouver to Fanning Island, is completed. The Assouan Dam on the Nile is opened December 8. Great Britain and Germany present an ultimatum to Venezuela, seize her fleet, and demolish a fort at Puerto Cabello. Venezuela appeals to the United States for arbitration.]

The Canadian-Australian cable completed.

ASSASSINATION OF PRESIDENT McKINLEY

(A.D. 1901)

WEMYSS REID

THE chief event to be recorded here is the sad and most unexpected tragedy of which the city of Buffalo was the scene on Friday, the 6th of September. President McKinley, whose power and popularity seemed to be steadily growing, and who had just found it necessary to announce that under no circumstances would he consent to serve for a third term in the Presidential office, had arrived a day or two earlier in the town in order to visit the Pan-American Exhibition. Thursday, the 5th, was "President's Day" at the Exhibition, and on that day "the greatest crowd that has ever assembled on the esplanade heard Mr. McKinley's speech, which was a long one and the most important he has delivered for a considerable time." It was, indeed, of an importance even greater than was realized by the reporters and critics of the moment, for its gist was an acknowledgment by the High Priest of Protection that the time was come when Protectionism pure and simple could no longer be maintained with advantage to the United States, and when it was neces-

President's Day at the Pan-American Exhibition.

sary in the interests of the new "world policy" of the Great Republic to modify it in the direction of a system of reciprocity.

McKinley's speech.

"Isolation," said the President, addressing not only the greatest crowd Buffalo had ever known but all the people of the United States, "is no longer possible or desirable. . . . Our capacity to produce has developed so enormously that the problem of more markets requires immediate attention. A system which provides for the mutual exchange of commodities is manifestly essential. We must not repose in the fancied security that we can forever sell everything and buy little or nothing. Reciprocity is the natural outgrowth of our wonderful industrial development. If, perchance, some of our tariffs are no longer needed for revenue or to protect our industries, why should they not be employed to extend our markets abroad?"

To describe such a speech as epoch-making is not to exaggerate. The President's words proclaimed the fact that a new departure in the policy of the United States was imminent, one that was bound to have momentous and far-reaching consequences, and that could not fail to have a direct and far-reaching influence upon the fortunes of all the great nations of the world.

But before men had realized the full meaning of McKinley's utterance, before even the hurried commentators of the daily

FOREIGN TROOPS ENTERING PEKING DURING THE BOXER MOVEMENT

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newspapers could expound his text to their readers, an event happened which gave to the speech a new and tragical significance, and for the moment swept its grave import out of men's minds. In that great crowd on the Thursday afternoon, unobserved by everybody and certainly unnoticed by the police, whose business it is, in the United States as elsewhere, to guard the person of the Chief of the State, was a young man of German-Polish descent, named Czolgosz, a native of Detroit, who had come to Buffalo intent upon the murder of the President. He was, as he subsequently confessed, an Anarchist, who had listened eagerly to the teachings of Emma Goldman and other apostles of Anarchism who have been free for many years past to spread their doctrines in Chicago and other great cities of the Union. Despite his constitutional timidity he had nerved himself to the commission of a stupendous crime, and but for the fact that the pressure of the crowd on Thursday was so great that he could not approach the President, he would in all probability have accomplished his vile purpose whilst Mr. McKinley was in the very act of delivering his great speech. Foiled on that occasion by the vast bodyguard of citizens who surrounded their Chief Magistrate, Czolgosz did not relinquish his intention. On the following day, Friday, the 6th of September, the President held a public reception in the Temple of Music, one of the

Czolgosz arrives in Buffalo.

buildings erected in connection with the Exhibition. Here, according to the immemorial usage of the Republic, he was at home to everybody, and the assassin, like any other citizen, was free to shake hands with him if he wished. Czolgosz was consequently enabled to come into close contact with Mr. McKinley, and he took advantage of the opportunity thus afforded him to commit the crime on which he was intent. At the very moment when the President was smilingly extending his hand to the murderer, the latter deliberately shot his unsuspecting victim in two places. One bullet struck Mr. McKinley's breast-bone, but did not penetrate the body. The other passed clean through his stomach and lodged in the muscles of the back.

How the assassin accomplished his deed.

We can all realize the awful moment that followed the cruel deed—the horrified incredulity of the crowd, quickly changing to consternation and a passionate rage against the criminal, the alarm of the President's friends and colleagues standing around him, and the pathetic inquiry of the martyr himself: "Am I shot?" The whole tragedy passed, as it were, in the twinkling of an eye, and before half the crowd in the hall knew what had happened Mr. McKinley was being carried to a neighboring hospital, whilst the assassin, whom the crowd vainly attempted to lynch was being hurried to a cell in the police station. Of the week of mingled hope and fear

"Am I shot?"

that followed there is little need to speak. For some days it seemed as though the President would recover, and the hopes not only of his devoted wife and sorrowing fellow-citizens but of the whole civilized world ran high. Then on Friday, the 13th of September, grave symptoms set in almost without warning and gave the lie to the optimism of the surgeons. Twenty-four hours later Mr. McKinley sank below the cruel blow, and a new President ruled in his place over the United States.

Such is the brief recital of a deed that equals in wickedness any of the same kind inscribed on the page of history. Before speaking of the character of the victim, it is well to put on record the depth and universality of the sympathy which his fate evoked. Twice before within living memory have Presidents of the United States died by assassination. Many of us remember how the news of Abraham Lincoln's fate was received in this country where he had not a few ardent admirers; most of us can recall the long weary days during which President Garfield was slowly sinking to his grave. But on neither of these occasions was there anything comparable to the public emotion that was caused by the death of Mr. McKinley. From every quarter the warmest expressions of sympathy were directed to the bereaved nation. Most noticeable of all was the extent to which the sovereigns of Europe

Sympathy of the whole civilized world.

participated in the general grief. If at a moment like the present the people of the United States can find consolation in such a thought, they can undoubtedly console themselves with the knowledge that the tragedy at Buffalo has drawn from the monarchs of the whole world heart-felt utterances which prove that they recognize in the holder of the American Presidency one who belongs of right to their own order—the ruler of a nation who shares not only the dangers but the dignities of the proudest sovereigns upon earth. To those of us who are old enough to look back as far as Lincoln's time all this seems strange and wonderful. If, on the one hand, this world-wide manifestation of sympathy bespeaks the growing solidarity of civilized mankind, on the other hand it proves how fully the Great Republic has taken its place in the ranks of the World Powers. President McKinley's death has given Europe the opportunity of acknowledging the fact that the United States now ranks, not merely in material wealth and energy, but in political influence and moral force, with the greatest Powers of the Old World.

Estimate of McKinley's qualities.

Mr. McKinley himself was not to be reckoned among the really great ones of the earth. He could not compare with some predecessors of his own in the Presidential chair. Nobody, for example, would place him on the same level as the Titanic hero of the Civil War.

But he was strong and shrewd, honest and patriotic. That he was almost fanatical in his devotion to Protection as the sheet-anchor of the economic policy of the United States was not to be denied. But in the main he was an opportunist, and even upon Protection he had, as his last speech proved, yielded to the logic of facts. During his tenure of office his country had deliberately abandoned the purely American policy which she had carefully maintained throughout her history, and had entered upon that path of Imperialism which has so strong an attraction for every growing Power. But it may be doubted whether Mr. McKinley was the real author of this new departure. What he did was to recognize that the opportunity had come, that the public—or the party—demanded that it should be seized, and to yield to what he believed to be the sentiment of the nation. That he sought to make the new departure as little dangerous to American interests as possible, and that he strove constantly to keep up peaceful relations with the European Powers, and above all with Great Britain, must be fully conceded to his credit.

The advent of Imperialism.

THE DESTRUCTION OF ST. PIERRE

(A.D. 1902)

ROBERT T. HILL

"WHAT has to-morrow in reserve for us? A flow of lava, a rain of pumice-stone, jets of asphyxiating gas; what submerging cataclysm, or will there be simply an inundation of mud? There is a great secret, and when it is known many men will be unable to bear it."—Editorial from "La Colonie" of May 7, 1902; the last paper published in St. Pierre.

Prophetic apprehension.

The editor of "La Colonie" wrote the foregoing portentous words two days before the great explosion, and they were probably the last copy hung upon the hook. They appeared in the columns of the last paper that was ever published in St. Pierre and were preserved through the energy of Father McGrail, the chaplain of the *Dixie,* who by scouring the shops of Fort de France, secured a file of the paper for a week prior to the catastrophe, which constitutes one of the most precious results of the expedition.

For a week the editor had been filling his columns with words of hope and cheer while ominous ashes were darkening his sanctum

window and the detonations within the bowels of Pelée were frenzying the population. Through those preceding days of general fear these were the only words of despair in his paper, and must have been written as the stimulus of hope deserted him and as he, at last, saw the finger of fate through the sombre surroundings. The following day, there were thirty thousand who were unable to bear the great Secret which was made known to them only by its great power.

Pelée's activity.

To-day, the great question still is, What was the secret force that so quickly destroyed the people of St. Pierre, consumed their houses by fire and then by reappearance so annihilated the city that in a few weeks the tropical vegetation, already springing up over its levelled ruins, will so hide them that the passing observer will not be able to locate its site? The destruction of St. Pierre was by forces never before recorded in the annals of volcanic disaster, and the scientific members of the *Dixie* expedition, who studied the phenomena, were confronted by conditions which they never anticipated and which will require months fully to explain.

The secret force.

Closely after the first news of the disaster reports were sent describing cataclysmic phenomena of many kinds as having accompanied the volcanic outbursts of Pelée and St. Vincent. It was announced that the entire upper half of Mont Pelée had been destroyed; that

Cataclysmic phenomena.

the coast had sunk to great depths; that the coast line had been changed; that the earth had quaked; that great fissures had rent the earth, opening new and terrible chasms; and that lightning of tremendous effect had accompanied the eruption, especially in St. Vincent, where it was alleged that over fifteen hundred people had been killed by it.

Slight physical changes.

Yet the Isle of Martinique to-day shows no serious change, except immediately around the thin rim of the old crater of Pelée, where some of the small projecting peaks, like those of Morne la Croix, have tumbled in, lowering by this process the summit only some sixty metres (two hundred feet). Every hill, valley, scarp, precipice or other surface feature of the relief as laid down upon the map of 1823 is distinctly recognizable. The only changes are merely the superficial destruction of vegetation and the veneering of a small triangular area with a thin layer of ashes and mud, so that it is converted from a green carpet of cane and woodland to a barren, desert mountain landscape like that of Arizona. Nineteen-twentieths of the area of Martinique is as green and beautiful to-day as ever.

Yet something terrible had happened, as attested by the thirty thousand dead and the terror of the hundred and fifty thousand survivors.

This Secret, which destroyed bright and cheerful St. Pierre, and changed it into that

ghostly, horrid ruin, will haunt me until my dying day. What was it?

It was not a flow of lava that the morrow had in reserve. Pelée has not sent forth flowing streams of molten rock for many thousand years. It is true that in the foundations of Martinique as seen around Fort de France there are ancient masses of lava* which may have once flown upon the surface, but these have been covered by thousands of feet of ashes (lapilli) and mud flows such as Pelée spits forth at long intervals of time. No lava flow.

Neither was it a rain of stone that overwhelmed the helpless people. There was for a few moments a fall of light pumice-stone, but these stones did not finish their hurtling flight or reach the earth until all the souls had joined their Maker. There is no record of this material in Martinique as having injured any person or thing. It was shot into the air with great velocity and did not reach the city until most of its inhabitants were dead. Furthermore, owing to its cellular structure, although heated when ejected, it probably cooled quickly in the air, while its specific gravity was so light it is doubtful if pieces of the size which fell would have injured any one struck by them.

Over the ash-covered surface of the area of destruction from Prêcheur to Carbet, ex-

*Hornblende and hypersthene-andesite, as determined by Mr. J. S. Diller from the writer's recent collections.

cept in the immediate city where their presence is obscured by the *débris* of the houses, one finds everywhere a cement-like covering of ashes which is dotted here and there by small stones of pumice which fell upon the surface. In some cases near the Rivière Blanche there are great bowlders of this material which were brought down by the surging waters in the days of strenuous overflow.

No inundation of mud.

Neither was it an "inundation of mud" that destroyed St. Pierre. Rivers of mud there were, and he who looks over the vast plain of Consolation back of St. Pierre and the former plain of the River Blanche—but a month ago sapphired fields of cane—now sees only great slopes of mud.

Neither was there an earthquake of sufficient force to cause the death and desolation of St. Pierre. There were tremors, it is true, which snapped the ocean cables like fiddle-strings, but these were so slight that they were hardly felt upon the land, except where recorded upon the sensitive instruments in the observatory of the Lycée, and, as written by the dead observer, "being horizontal they were not felt by persons." Furthermore, there is no evidence throughout the island of a stone or stick having been shaken from its place by earthquakes.

The submerging cataclysm with its Secret, which thirty thousand people were unable to bear, is one the like of which has never before

An unprecedented disaster.

been recorded in the annals of disasters resulting from nature's stupendous forces. I can not here submit detail evidence as recorded in my notebooks with dates and names of witnesses, but shall endeavor to interpret what happened as I concluded from all testimony, including narratives of human survivors and eye-witnesses of the catastrophe, the silent evidence of the ruin and wreckage, and my personal observation of the several subsequent great eruptions.

Distinct phenomena.

Two great and distinct kinds of phenomena probably took place on that eventful morning of May 8, one within and the other without the crater. As a whole, they may be compared to those which accompany the firing of a projectile from a great gun involving (1) the explosion of one kind of gas, creating a propelling force which may be compared to a gun within the crater, and (2) the travelling through the air of a deadly projectile (a cloud of hot steam, gas, and smoke) which may or may not itself have been explosive.

1. Within the crater there was a terrific explosion, presumably from the meeting of water and the molten rock matter.

2. This explosion projected out of the mouth of the crater a dense cloud of ash (lapilli), steam, and heavy gases.

3. Following the cloud was the vertical flash from the crater itself, presumably the

flame of combustible hydrogen within the crater.

4. Succeeding the flame was the noise of the detonation, which, although originating instantaneously with the flame and puff, owing to the slowness with which sound travels, was not evident to outsiders until the preceding phenomena had been observed.

The great gun having fired its projectile, let us consider what subsequently happened to the latter:

The mushroom-shaped cloud.

1. The force of elevation being soon overcome, the cloud mushroomed, first making a dense, round, boiling head, which has been variously compared to a cauliflower, a human brain with its convolutions, and the spreading foliage of a palm tree.

2. The material in the clouds was heavier than the atmosphere—at least in the case of the cloud erupted from the lower vent—and hence, after losing the vertical direction of projection, it sank downward toward the surface of the earth through gravity and was propelled southwestward by the strong trade-winds.

3. After reaching the external air, and a short distance from the crater, lightning-like flame and explosion took place in the cloud.

4. This generated still greater heat in the already hot cloud and fired the buildings in its path.

5. The ignition was of an explosive nature

which caused a terrific air movement that travelled rapidly in all directions from the seat of explosion. Terrific air movements.

6. After the propulsion of the air outward by the explosion there followed a return movement of the air from the inrush to fill the vacuum which had been created.

7. The ignition in the cloud may have been the combination of some heavy gas with atmospheric oxygen, and this exhausted the latter from the atmosphere so that there was nothing to breathe.

8. The cloud of ash, steam, and gas was hot when it left the volcano—sufficiently so to injure people who were not necessarily within the radius of the explosion.

On that morning there were three of these double-natured eruptions in rapid succession. Three successive eruptions. The first, which came from the summit of the mountain, was a vast column of black ashes mingled with steam, which ascended and spread out like a great palm tree—as stated by Father Altaroche, who witnessed it from a commanding view at the village of Mont Vert, five miles due south of Pelée peak. A few moments later another great puff of similar material arose from the lower crater of the western slope of Mont Pelée, nearly fifteen hundred feet below the summit. These great smoke clouds were at first propelled upward into the outer air by the initial explosion within the mountain, the light of which was

not seen nor the noise heard until the puffs had come out of the vents. Then followed great jets of flame from the mouth of the crater like the flash of a great gun. Some seconds after this the stupendous booming of the detonations reached the ears of those who had observed the cloud of smoke and seen the flash of light. Had this been all, the people of St. Pierre would have been alive to-day; but, besides the explosion within the mountain, the evidence strongly points to another one in the air, and the nature of this is the Secret of the submerging cataclysm which the people of St. Pierre were unable to bear.

Explosion in the air.

Contrary to those laws of nature which would have been followed had the clouds been composed only of hot steam and lapilli, the great cloud from the lower crater, instead of rising, descended and closely hugged the contour of the land as it rolled away in a south of west direction toward the sea and over the fated city. What was the Secret of that descending heated cloud which caused it to fall instead of rise?

Let us digress for a moment to look again at the summit cloud. Some seconds after it had left the crater, and long after the upward shoot of flames within the crater had died, great jagged streaks of fire were observed shooting back and forth, upward and downward, here and there through all parts of the black cloud, lightning-like in their effect,

The summit cloud.

yet unlightning-like in color and action, and unaccompanied by thunder. There was apparently something born in that cloud after meeting the outer air which, notwithstanding its superheated condition within the crater, did not ignite until it left it. That something was the Secret of Pelée.

These lower clouds of lapilli were not only hot and heavy, but after they had reached the outer air and become well mixed with it another terrible phenomenon occurred. This floated on southwest in the direction of the trade-winds toward the fated city, and, when almost upon it, several seconds after having emerged from the vent, it ignited and exploded, and at that moment, within the radius of its action, all nature cried:

Another terrible phenomenon.

> "Death has struck, and nature, quaking,
> All creation is awaking,
> To its judgment answer making."

While we who were spared from participation in such a catastrophe might well say, "Deliver me, O Lord, from that eternal wrath on that awful day when the heavens and earth shall be shaken and Thou shalt come to judge the world by fire."

There was no thunderous noise or detonation, but with terrific force sheets of flame ignited within this cloud and, as seen by Father Altaroche, travelled from north to south over the city with lightning quickness,

Sheets of flame.

setting fire to it. Merely a blinding flash of fire within the cloud, and in a moment the whole of the great fireproof city built of stone, with roofs of iron and tile, was on fire.

That something in that awful cloud, which had fallen instead of risen and had exploded over the northern end of the city—the terrible Secret—was probably an invisible gas fired from the crater that united with another in the air.

The two gases.

All the phenomena of the catastrophe tell us that the latter of these gases could only have been the oxygen of the air. The nature of the other gas (if there was one) which was belched from the crater and contained within the dark cloud of lapilli that rolled down from Le Tang Sec was a heavy gas the composition of which is still unknown. It was a gas which would not ignite within the oxygenless crater even under the intense heat there present, but which exploded with fatal force upon mixing with the oxygen of the cool air a mile from the crater.

The first explosion within the crater was more than a steam puff. The upward-shooting flame which followed it was most probably hydrogen gas, accompanied by the sodium colors derived from sea waters.

The Secret of Pelée.

The Secret of Pelée, according to our present working hypothesis, now resolves itself into a question of the determination of the gases. Of these there were probably at least

two kinds, if not more. The great volume of water, the meeting of which with the hot magma of rock is the fundamental cause of volcanic explosions within the crater, was probably resolved into oxygen and hydrogen, and the latter burned after the projectile cloud had shot forth.

But what of the gas in the projectile cloud which did not burn within the fiery crater, but shot forth into the air, combined with the oxygen of the air? It is well known that some volcanoes emit carbon monoxide, which has an affinity for free oxygen of the air, but this is a lighter gas than air and would not have floated downward. Again, there is the wholly explosive marsh gas (CH_4), and this Professor Landes of the St. Pierre College reported he had detected in the mud of the Rivière Blanche several days before the great Secret enveloped him: but this gas is also lighter than air.

At present we have in view but one other explosive gas which might have caused this damage, sulphuretted hydrogen (H_2S). This gas has a specific gravity of 17, which is much heavier than that of air (14.5), and is the only one of the gases mentioned which could have floated downward upon the city. There is much evidence to this effect. Sulphuretted hydrogen.

Should Science, with data in hand, write an epitaph over St. Pierre, it would be a cryptogram as follows: H_2S+O.

But there are alternative hypotheses concerning the nature of the Secret, and one of these is that the destruction came from a blast of intensely hot steam and cinders. The data thus far collected tend strongly to uphold the gas explosion theory. Yet the evidence must all be in before the final verdict can be given.

Various theories.

THE AUTOMOBILE

(A.D. 1902)

ROBERT CRAWFORD

FRANCE is the paradise of the motor-car, and is likely to remain so a few years longer. The birth and rise of this new form of locomotion is but a short chapter in the history of modern industry, but it is a fascinating one. Builders and buyers alike were enthusiasts and poets in their way. The former can boast of a record of steadfast faith, of dogged struggles with all manner of difficulty and disappointment, of plunges into seemingly wildcat ventures, which, in defiance of all reasonable expectations, have turned out well; the latter may claim to rank as sheer enthusiasts with the Dutch tulip-fanciers of old. The whole history of automobilism in France is colored by the spirit of enthusiasm of its founders—of those who made the first auto-cars, and of those who bought them.

France the home of the auto-car.

Those motorists, in bearskin jackets (in July!) and with yachting-caps and smoked spectacles, are legion, who dash along the roads of France, and cheerfully swallow dust for hours because they believe that they are

Pioneers and patriots.

fulfilling a mission as pioneers of "the Great National Industry"; and when they get into difficulties with the police for "scorching" (nineteen miles an hour is the limit, except for races, with special town regulations), they are not unwilling to look upon themselves as martyrs for *the* cause.

The history of automobilism in France may be divided into four periods: (1.) The early —almost prehistoric—period of steam-boiler carriages from 1860 to 1880. There were horseless carriages in England some years before, not to mention a self-propelled vehicle known to have existed in 1769; but this interesting infant industry was stifled by the Locomotion Act. (2.) The birth and development of modern automobilism, 1880 to 1890. (3.) A period of great prosperity, due to the oil motor, 1890 to 1895. (4.) The modern period. The first half of this period, 1895 to 1898, coincides with the racing mania; the latter half with a reaction of public opinion against racing, ending in prohibition of high speed, except under severe limitations.

Count de Dion.

The great year 1882 is a landmark. Count de Dion, the friend of General Boulanger, a society man and an authority on duelling, suddenly disappeared from politics and from the clubs, and no more was heard of him for some time. He had resolved to do something, to get on; but how was he to succeed unless by striking out in some entirely new line? He

had made the acquaintance of a mechanic named Bouton, whose head was full of notions, which, with his old foreman's experience, he knew how to put into practical shape. Count de Dion brought a little capital, social connections, and—as it turned out—no mean degree of business ability. They put their heads together, and decided that they would build horseless carriages. Why that, and not something else? Probably because cycling was fast coming into vogue: the "safety" dates about this time. The two partners foresaw that cycling would create a taste for fast travelling on roads.

Developments of cycling.

For some years Count de Dion and Bouton worked in their wooden shanty at Suresnes sustained by faith. They were literally building the cart before they knew where they could get the horse—I mean a good motor. Industry, in their case, had its romance. They worked with the self-confidence of youth. An old-established firm of machine builders would not attempt the horseless carriage problem, because there was abundant reason to believe nothing would be gained by it.

It seemed impossible at the time to build a small and yet efficient machine. Count de Dion and Bouton were two years before finding a suitable boiler. In 1884, they turned out a bicycle with machinery weighing one hundred pounds and running eighteen miles an hour. In the following year they could do

The first car.

one kilometre in one minute on a tricycle. The year 1888 is another date to be remembered. The cycling boom had reached its height in that year, races were being run on every national road, velodromes were set up all over the country (most of them since become bankrupt), and betting on cycling events was prevalent.

Serpollet's invention.

M. Serpollet's small-bore tubular boilers (an altogether remarkable invention) solved the problem of making a light yet efficient engine. This was in 1888, and M. Serpollet's invention has stood the test of time. At the 1900 *salon du cycle* a Serpollet carriage was exhibited, which was purchased by King Edward VII.

Automobilism is so much associated in people's minds with petroleum that an effort of memory is necessary to remember that it began with steam. Automobilism was popular in France before it was practical. The wish was father to the success. Very likely this will again be the case in aërial navigation. In 1894, the "Petit Journal" opened a prize contest to be run from Paris to Brest and back (750 miles).

In 1895, a new invention revolutionized the automobile industry—namely, the oil motor—for which we are indebted to Herr Daimler. The Daimler motor was immediately adopted by the motor-car building firms of Panhard & Levassor and Peugeot.

It would not be unfair to say that, after this far-reaching invention, subsequent improvements in oil vehicles have been merely improvements of detail, accumulated, however, in such number as to make a modern auto-car a very different thing from its prototype of ten or fifteen years ago. The oil motor.

The history of automobile racing in France is a brief but a checkered one. It covers a period of six or seven years, during which the attitude of the public has undergone several changes. These phases of opinion form convenient subdivisions for the purpose of our history. Motorists of the furious-driving school are apt to resent remarks of outsiders. But has not the man in the street the right to say he objects to being run over?

Between 1892 and 1895 motor cars were already snorting along the highways of France. Motorists were received in the towns with misgivings and in the villages with positive hostility. The peasants resented the noisy, terrifying horseless carriage that ran over their dogs and chickens, and in the hands of inexperienced drivers, caused serious accidents. This was a period of quarrels and lawsuits between local authorities and motorists. Popular prejudice.

In the second period, from 1895 to 1898, the peasants and people of country towns were brought round. They were made to believe that automobilism would bring about as great a revolution as railways had done fifty years

before—that motor omnibuses would soon connect every village with the neighboring towns and that wealth would be multiplied.

Auto-car racing.

This was the period of racing and record-breaking. Even the peasants grew enthusiastic. The first long-distance race of this period (Paris to Bordeaux and back, 745 miles) was won by M. Levassor, on a carriage built by himself, in 48 hours 48 minutes, a feat of endurance. M. Levassor did not take a minute's sleep or rest for two days and two nights. These three years, 1895 to 1898, were a period of boom for carriage builders, and though they charged fancy prices they could not meet the demands of purchasers.

In the third period, from 1898 up till now, the weight, the speed, the power of carriages have increased every year, the peasant has been disappointed in his hopes, reckless driving has become a national nuisance, the highways are getting dangerous, and accidents are happening daily. The peasants' attitude is now one of sullen hostility. Government and local authorities issue regulations against fast driving, and an order was issued (in 1900) which prohibits racing, except by special permission.

The Paris-Berlin race.

The Paris-Berlin race on June 27, 28 and 29, 1901, marks a triumph and a collapse. When the hundred and ten competitors started from Champigny automobilism was still what it had been from the foundation of the

Automobile Club—a sport. When the winners made their triumphal entrance into Unter den Linden it was a sport no longer, but a means of transportation. This evolution would have taken place sooner or later. A long time ago M. Giffard, the editor of the "Vélo," defined what automobilism should be in an epigram: "Non pas Sport, mais Transport." It was the running over the little boy at Rheims that precipitated the change.

A change.

THE CORONATION OF ALFONSO XIII.

(A.D. 1902)

RICHARD HARDING DAVIS

THERE is a crown in Spain, but the King does not wear it. Unlike other monarchs, to become a king he does not have to wait until the crown is placed upon his head, but he is born a king. When, sixteen years ago, Alfonso the Thirteenth was passed around the ante-room to his mother's bed-chamber on a silver tray, robed simply in pink jeweller's cotton to be observed by the foreign ambassadors, he was then just as much of a king as when, in the Cortes, he laid his hand on the Bible and swore to observe the laws of his country.

The King's oath.

The oath he swore is this one: "I swear to God on the Holy Gospels to observe the Constitution and the laws. If I do this may God reward me, if not, may He call me to account." At the conclusion of this brief oath, which the boy recited in a firm, clear voice, some one cried, "Viva el Rey!" and the entire gathering shouted "Viva" once. It rang like a salute of musketry.

There were a crown and sceptre on the table beside the King, but he did not touch

them. The only other sign of a crown in the Coronation exercises was the one on the top of the carriage in which, after taking the oath, he rode from the Cortes to the Church of St. Francis to listen to the Te Deum. In this procession there were twenty-three state coaches, the carriage of the King, known as the Coach of the Royal Crown, bringing up the rear.

The Royal procession.

At the head of the procession were heralds in mediæval costume, mace-bearers, and mounted drummers with their silver kettle-drums flashing from either side of the pommel, grooms in white wigs, silk stockings and the court livery of three hundred years since, leading Arabian horses, with their empty saddles of velvet and gold; then the carriages of the grandees and the royal family. These were the state coaches. They rocked and swung on carved wheels, heavy with ormolu brass. The bodies were covered with enamel, tortoise-shell or gold leaf, on which were painted coats of arms and scenes and landscapes as exquisite as those on an ivory fan. The trappings were of red morocco and stamped Spanish leather. Postilions in jackets of gold lace rode the near leader of each of the six horses, a driver in a three-cornered hat and white wig was lost on a box-seat as large as a feather-bed and covered with a velvet hammer cloth. On the heads of the horses and on the tops of the coaches were dyed ostrich feathers and plumes of gold. The interior of the coaches was

lined with padded silk and satin. They resembled monster jewel cases on wheels, and as they moved slowly forward in the brilliant sunlight, and the horses tossed their plumes, and the jewel boxes rocked on their springs, they flashed like the fairy coach of Cinderella.

In form, the Church of St. Francis is circular, and surmounted by a great dome. Without the six small chapels which open upon it, it is much the same size as the rotunda of the Capitol at Washington. It has a very modern air. It is lighted by electric lights, and looks as though it had been lately gilded. The paintings on the walls and in the dome also have a modern look, and suggest Bouguereau, when he is most like Bouguereau. It was here the King listened to the Te Deum, but, except for the wonderful music, the scene had less the suggestion of a religious ceremony in a cathedral than of an audience hall in a palace. The back of the church was almost entirely hidden by royal princesses and the grandees, so that, instead of the altar, one saw only tiaras, bare shoulders, epaulets, and decorations. And in the body of the church the priests and bishops were entirely lost in the crush of foreign princes, members of the embassies, captains-general, admirals, and diplomats. The ladies of Madrid, wearing black mantillas, were seated in an outer fringe against the walls.

A theatrical service.

When the King entered the cathedral ten

priests walked beside him, supporting over his head a canopy, heavy with silk and gold. But, not being in the habit of carrying canopies over kings, the priests allowed this one to droop and sometimes the fringe fell in front of the King's eyes and sometimes the canopy bumped him on the head. The Queen-Mother, who now, since within the last twenty minutes, followed behind the King, as she passed the tribune of the visiting strangers, could be heard expostulating with two priests, who were so overcome with stage fright that they were allowing their part of the canopy to brush the King's hair the wrong way. But finally the King, when he was half-way down the aisle, dodged from under the canopy and walked on ahead of it, leaving the ten priests struggling with their burden and hurrying to recapture him from the rear.

Unrehearsed effects.

At the church the music of the Te Deum was the most impressive feature of the ceremony. It swept from the choir loft, high over the heads of the people, across the great dome to the gallery opposite, where another chorus of voices and brass and string instruments rolled it back again. Only with an opera-glass was it possible to distinguish the singers and the musicians in the dome. They were so high above the people that the antiphonal chorus was like an artillery duel in the clouds. The music swept down out of the dark dome like a wave of thunder, silencing

Impressive Te Deum.

the whispering princesses before the altar and reaching even the impatient multitude waiting outside on the sunlit tribunes. It was glorious music, noble, magnificent, tremendous, and as the thunder ceased, and from the painted saints and angels in the dome a single tenor voice rose proudly and jubilantly, the little king ceased smiling at the wax which dripped from a candle upon the epaulets of his equerry and, with his mother at his side, dropped to his knees.

The reception which followed the taking of the oath was notable chiefly on account of the beauty of the tapestries of the palace and of the decorations of its halls and corridors. It was also interesting on account of the shock it gave to visitors who had heard much of the strict etiquette of the Spanish court. To them it was surprising to see the King and the Queen stepping from their daïs and mixing in the crowd, talking and shaking hands with their Spanish friends. It looked much more democratic than a reception at the White House.

Democratic reception.

The review of the troops was notable on account of the excellent showing made by the cavalry and artillery. The latter, who came at the end of the long procession, passed the tribunes at a trot, which was quickened into a gallop, the guns of each battery passing as though made of one piece and the cavalry keeping a line which one seldom sees outside of military tournaments.

THE CORONATION OF KING EDWARD VII.

(A.D. 1902)

SIR GILBERT PARKER

"OUR Gracious King; we present you with this Book, the most valuable thing that this world affords. Here is Wisdom; This is the Royal Law; These are the lively Oracles of God."

These were the words uttered by the Dean of Westminster while handing the Sovereign of Great Britain and Ireland and all his Dominions beyond the Seas the Holy Bible—the last act of the formal coronation of the King. Final act of coronation.

The oath had been taken, the anointing had been done, the spurs and sword had been presented, the armilla girded on and the Imperial mantle had been hung upon the King's shoulders. The orb had been given into his hand. The ring, the ensign of royal dignity, had been placed upon his finger. He had received the sceptre, the ensign of kingly power and justice. Solemnly he had been led to King Edward the Confessor's chair, that ancient relic of England's sovereignty and might, and there the crown of pure gold had been put upon his head to a splendid outburst of acclamation, with the sounds of trumpets, while from out-

side came faintly the booming of guns and the clanging of bells. But the presentation of the Bible touched a note which was sounding softly in millions of hearts in the land and was deeply characteristic of this gorgeous ceremony—this tenderly religious service.

There were greater moments, more picturesque incidents, in this noble drama of the English Constitution than this which I choose for the pivot of comment, but in the midst of glamour and pageantry and glittering form, the bare simplicity of the words, their grave significance, brought the great scene into homely relation with the innate religious sentiment of this kingdom and this empire.

With this act, as much as with the celebration of the Holy Communion which followed, a great hush spread through this vast, beautiful temple, made even more beautiful by the thronging valor and intellect and nobility of an empire and consecrated by ages of solemn service and history to loftiest uses.

Oath of allegiance.

This scene was in fine contrast to that which followed, when the King, seated on his throne in the centre of the theatre on which the faithful Commons and their ladies, and the peers and peeresses of the realm, in robes of state, looked down, the Archbishop, as head of the spiritual lords, and the Dukes, as heads of each order of temporal peers, touched the crown worn by the King, kissed him upon the cheek and swore allegiance.

Nothing was missing to give the scene its true meaning of thankfulness to Providence for the King's recovery and freedom from national anxiety for further security of constitutional life and the disproof of all prognostication.

This made the service in the Abbey probably the most notable event, not even excepting the Jubilee of Queen Victoria, which has ever taken place within its walls.

Impressive aspect of the Abbey.

The whole interior of the cathedral was walled with seats—in galleries, chancel, transepts, aisles, and nave—like a theatre, and, strange to say, without marring its sacred appearance and character. As far as eye could see, from altar to western door, the place was terraced high with people. Give some vast opera-house treble its size, lend it the unpurchasable grandeur of architecture a thousand years old, make the people on the stage real people, a real king and queen and dukes and earls and heralds and kings-at-arms and standard-bearers; conceive the event to be the history of a people expressing itself at one solemn moment in ancient symbol and pious rite; see one man made the centre of the authority of the people, the expression of their will, the link in the chain of a nation's life which he himself did not make and can not destroy; surround him with brilliant, august ceremony; circle him with the heads of houses and families of his kingdom as ancient as his own;

place him thus high after a season of national storm and stress, after he himself has struggled back gallantly from the grave to a people's confidence, admiration, regard, and fealty—and you have a picture unparalleled.

Pessimistic prophecies.

How much prophecy has been proven false these past weeks, how much cheap clairvoyance there has been, how many wise folk said Edward would never be crowned—that cheap superstition of human nature which hangs on the heels of the world's great events.

Edward has been crowned.

They said—the sallow harbingers of trouble—that the Coronation would not be worth going to see. Had not all the foreign princes and potentates gone back again to their homes? Where would the splendor be had? So many of the Colonial and Indian troops returned whence they came. Was not the circle of imperial demonstration broken? Had not everybody left town? The Abbey would not be full, they said.

Well, what has happened? We did not miss the foreign princes and potentates, and the Colonial and Indian troops in large numbers challenged the admiration and regard and applause of hundreds of thousands.

Whatever else the people came out for, they came to see the prince whose life had lately hung in the balance and who in all his suffering proved himself as good a fighter as any of

his subjects, and they acclaimed him as a brave man in the streets even as they acclaimed Kitchener and Roberts.

The foreign princes were missed—the show, the bravery of color, the international courtesy their presence would have expressed—for the people love kings and the livery of kings.

But what was missing then was made up by the wonderful gladness of the subjects of the sovereign at seeing in the streets, in his gold and crystal coach, drawn by the gayly caparisoned cream cobs, and on the throne in the Abbey in his imperial mantle, the sceptre in his hand, the King whose lamp of life burned but dimly a few weeks ago. Popular enthusiasm.

How splendidly he bore the ceremony! There was no sign of weakness or feebleness. Alert, composed, watchful, steady of step and strong and clear in response. During the two and a half hours of ritual in the Abbey, his robes and mantles heavy on him, there was no sign of the fight he had had, of the illness from which he had risen, save that he looked rather thinner than of yore, was somewhat fine-drawn and something wistful.

The Queen looked the more fragile, though she bore herself with a sweet, firm dignity and played her part with infinite grace, as did the Princess of Wales in her less important place in the proceedings.

There were several touching incidents in

A touching incident.

the ceremony, but one stands out very suggestively in the circumstances. When the Archbishop of Canterbury, whose wonderful voice could be heard in every part of the great building, had enthroned the King, with the help of the Bishop of Durham and the Bishop of Bath and Wells, whose hereditary right it is to walk with the King and attend him at the Coronation, and had knelt and paid fealty, he swayed slightly and seemed unable to rise. He made an effort, and, with the help of the Bishops beside him, leaned over and kissed the King's cheek, according to ancient custom. Then he essayed to kiss the King's hand, and again he tottered with weakness and seemed about to fall. The King, with the quick kindness so natural to him, and regardless of his own recent weakness, caught the Archbishop's hand in his and assisted him to rise. Having done so, he kissed the Archbishop's hand gravely, and, still swaying and with great feebleness, the aged prelate moved slowly back to the altar, assisted by his attendants.

Another moment of compelling interest came when the Prince of Wales advanced to the throne to pay allegiance. Having knelt he came and touched his father's crown and then kissed him on the cheek. The King thereupon drew him down and, taking his head in his hands, kissed it solemnly, then shook his hands warmly several times, both deeply moved, as were all who saw. None

was ashamed to-day to feel the emotional flood welling up, for it came from a nation's soul.

It was a family party, a great national home-cooking — England's redivivus, the motif of the centuries repeating itself in this new overture of another act in the brave drama of progress and civilization. England redivivus.

Among those who were found in the procession of the King and Queen on this 9th of August were families whose representatives have walked in similar processions since the Coronation day of Richard II. Then an Edmund Earl of Cambridge, a Richard Earl of Arundel, now Norfolk, an Earl of Warwick, an Earl of Stafford, and an Earl of Salisbury; a De Percy, now Duke of Northumberland, a De Neville and a Grey de Ruthin did duty at the Coronation. To-day, heads of these same families—save that of Salisbury—were on duty beside the King and were in the noble group around the throne. Great houses represented.

Conspicuous in this circle were the Duke of Devonshire, the Duke of Norfolk, Earl Marshal, the Duke of Leinster, the Duke of Abercorn, the Marquis of Conyngham, the Duke of Marlborough, the Duke of Fife, the Duke of Argyll, whose father was on duty at Queen Victoria's Coronation; the Marquis of Londonderry, the Red Earl, Earl Spencer, the Earl of Crawford, the Earl of Shrewsbury, the Earl of Derby, the Earl of Rose-

bery, the Earl of Errol, the Earl of Cadogan, the Earl of Lucan, the Earl of Pembroke, and Mr. Arthur Balfour, Prime Minister of England.

Other names, once so familiar to English people, are no longer heard, though at Queen Victoria's Coronation they were royal titles; namely, the Dukes of Kent, Sussex, and Gloucester.

Absence of Salisbury.

To-day another name, another figure, was wanting to complete the circle and ancient service and splendid history of the great families of England—Lord Salisbury was absent through indisposition. One looked in vain in the noble group about the throne, magnificent in robe and coronet, part of a pageant of an antique world, with its constant service, for the massive frame and gray head of this Minister, whose loss to the government will be more clearly and deeply felt as time goes on. Lord Cranborne, his son, sat with his Countess in a front seat of the House of Commons gallery, but he has far to go before he finds a place and power such as his father gained and kept to the last. No Minister at Queen Victoria's Coronation was like him in weight, or prestige, or ability. Lord Melbourne, the then Minister, was more the sort of man that Arthur Balfour, the present Prime Minister, is—keen, fine, persuasive, logical, and of imperturbable temper—and to-day, as one looked at England's Prime Minister—

tall, slight, clear-cut, modest, and calm, by comparison with the resplendent peers around him, so simply dressed in gold-laced coat and white-satin breeches—one received a sharp impression of the change come upon the government of the country. The younger men, the keener life, the less reserved, form the less impressive personalities, but perhaps a closer touch with the quick-changing temper and swift movements of public life of the twentieth century.

This impression was sharpened by seeing in the choir, among the Diplomatic Corps, the tall, still dignified figure of the Chancellor of the Exchequer, Sir Michael Hicks-Beach, whose successor was announced this morning; by the sight of the Duke of Devonshire, whose successor was also named to-day. Salisbury, Devonshire, Hicks-Beach — the oldest and best of those who have served the state—they go forever, no doubt, and it was meet that two of them at least should add to the meaning and majesty of to-day's great function by their presence. Changes in the Ministry.

Besides the group about the throne, among whom the Duke of Argyll was a most stately figure, and to whom the King handed his sceptre to hold during the Communion Service—an act of great royal favor—there were other groups splendid to see. Was it the occasion itself? Was it the lofty drama and ancient pageantry, the costumes and regalia

of old heroic days, the heralds, the trumpets, the exquisite pages, the ritual which began when the kings of ancient Britain were consecrated and was carried on with increasing form and the same substance to Harold and William and Richard I. and Elizabeth and Charles, even to this day—was it any or all of these that made all the personages who took part in the ceremony bear themselves with such grace and befitting dignity, and made urbane and harmonious this play of plays, this solemn ratification of a nation's choice of kings? For he was chosen, duly elected by the people to-day, as has been the case since the olden days when the king to be crowned shut himself up in the Tower of London after succession, lest he might be dispossessed, until the Coronation, when he was solemnly elected by the people—and it was so to-day. King Edward was elected by the people:

A solemn election.

"Sirs, I here present unto you King Edward, the undoubted King of this Realm; wherefore, all you who are come this day to do your homage, are you willing to do the same?" said the Archbishop of Canterbury in a voice heard distinctly to the western door; and a great shout, led by the massed choristers, cried, "God save King Edward!" followed by a fanfare of trumpets.

This election has a greater significance in the democratic England of to-day than even in the days of King John, when Archbishop

Hubert Waller insisted on his election that he might avoid the responsibility of crowning such a man. Kings exist in England by virtue of heredity, but they also exist by virtue of Act of Parliament, as witness the passing of the Stuarts and the advent of the Guelphs. Popularity of the Guelphs.

In old days a king was not really a king until he was elected and crowned, and so it was that eldest sons were sometimes crowned in the father's lifetime to avoid an interregnum. Such days have gone, and the Guelphs have nothing to fear at the hands of rival dynasties or from the will of the people. They are at last firmly allied with the history of the land and are close to the hearts of the people. With all their faults and mistakes, they have been, on the whole, beloved. Even George IV. was immensely popular and to his last day could command the enthusiasm of the man in the street; and to-day the royal family showed to noble advantage. Over thirty Guelphs walked up the long aisle and through the great rood screen into the chancel and choir to take their places nearest to the throne, and royal grace and noble carriage marked their deportment throughout. Slow and stately they moved through the historic fane —Princess Christian, Princess Louise, Princess Henry of Battenberg, the Crown Princess of Roumania, the Duchess of Fife, the Princess Charles of Denmark, the Duchess of Sparta, the Princess Victoria of Wales,

and those other noble relatives, the Duchess of Albany and the Duchess of Connaught, not less regal. Both come from kindred stock to the Guelphs.

Clockwork precision.

So wonderfully was everything timed that in this varied and complex panorama every figure drew to its place, moved in its orbit with noble precision and grave accord. Nor were the young royalties behind their elders. The children of Princess Christian, of Princess Henry of Battenberg and the Duke of Connaught, smiling and composed, glided through the great vista of blue and gold, the cynosures of thousands of eyes, a long, graceful line which radiated in the sanctuary to high-appointed places.

No figure of them all was more revered than the Duke of Cambridge, none more beloved than the Duke of Connaught—thorough, efficient soldier, quiet, high-minded gentleman, the King's right hand—but for the Princess May, now Princess of Wales, grown more princely with responsible years, and for George, Prince of Wales, straightforward, honest, shrewdly intellectual, become more royal of mien since his tour round the world; for the little manly Prince Edward of York—a future king also—was reserved an applause which meant more than the *vivat! vivat! vivat!* of the choir, or the music of Sir Frederick Bridge, Sir Walter Parratt, or Sir Villiers Stanford, to whom honor is due for

an exquisite and noble service of music, and particularly to Sir Frederick Bridge.

The cheering in the cathedral rivalled that spontaneous outburst of "God save the King!" started in the great stands outside the Abbey as the King issued from the west door and entered his state carriage with Queen Alexandra. The hymn poured down from those high-terraced pavilions, with their medieval form and structure and their antique hatchments, and was carried on to the Houses of Parliament stands and so on up Whitehall and on to the doors of Buckingham Palace. "God save the King."

It was thought, in 1838, a wonderful thing that seats for the procession sold at two-and-sixpence and three shillings; to-day they sold at from one to ten guineas. Then it was noted that the ladies took off their bonnets as Queen Victoria passed. To-day, if they did not take off their bonnets, they wore their hearts on their sleeves, and sang and cheered and waved their handkerchiefs as bravely as the men.

There never was a more orderly crowd, never were arrangements carried out more satisfactorily. Everything worked without a hitch, and inside the Abbey there was the most absolute comfort, and the machinery worked as though it had been going ten years, so splendidly had the Duke of Norfolk and Lord Esher arranged everything and drilled all the officials concerned. In every sense the thing went on wheels. Excellent management.

Taking it all in all, the most striking remembrance I have of this pageant ceremony and national rejoicing is the moment when the crown was placed on the King's head and all the peers stood up and put their coronets on their own heads with as much precision and to as fine a dramatic effect as though they had been drilled by line sergeants.

But finer still was the scene when the crown was placed on the Queen's head and all the peeresses rose in their places and put their coronets on—hundreds upon hundreds of duchesses, marchionesses, countesses, and ladies in scarlet and ermine and ablaze with jewels, bared arms raised, adjusting the scarlet and gold circlets upon their heads behind the radiant tiaras they already wore.

Last impressions.

My last impression is of the King walking slowly down the chancel, with the orb and sceptre in his hand, moving with an assured step and bowing to right and left, his purple robe carried by many pages, his crown glistening in the gaslight from the dark old pillars of the Abbey. The after view of him in his state carriage driving away with his Queen, affable and royal of mien, does not efface the other picture of him, proud and satisfied, met by a storm of cheers, as he made his way into the outer world of work and cares and high responsibility.

THE NILE DAM AT ASSOUAN

(A.D. 1902)

FRANK FAYANT

THE First Cataract of the mighty Nile, which has roared and thundered through the ages, has been taken captive by English engineers. From out of the red granite quarries, where the ancient Egyptians, by patient and persistent toil, hewed their eternal monuments, a million tons of stone has been taken to dam the cataract. For four years an army of men has labored to erect a great granite wall to bind the turbulent floods that rush 3,500 miles through Africa from the Equatorial lakes to the Mediterranean. The shriek of construction engines, the pounding of restless pumps, the rattling of powerful cranes, has awakened the Land of the Pharaohs. The cataract of seven thousand summers has been blotted off the world's map, and in its stead has been created, by the genius of Twentieth Century engineering, a mighty reservoir, that sets back between the hills of Upper Egypt for 200 miles, storing a milliard tons of water.

Blotting out the First Cataract.

And why have men toiled and spent millions of treasure to raise this mile-long wall in

the heart of dried-up Egypt? Is there something in the atmosphere of the ancient land that compels men to quarry the rock and raise monuments that will endure to the end of time? Without the Nile, Egypt would be as barren as the Great Desert. With the great river, fertile Egypt is but an elongated oasis, a thin green line on either side of the stream, from Alexandria up into the heart of Central Africa. This thin green line in the days of the ancients made Egypt the garden and granary of the world. And for thirty centuries men have struggled to widen this line. But all the mighty undertakings of the past—the building of dykes to bind the floods, the raising of great walls to hold them back, the digging of canals and basins to lead the water to the parched fields—have been but pigmy efforts compared to this last work, which, at a single stroke, increases the national wealth by £80,000,000.

The thin green line of fertility.

For water is gold to Egypt. In flood it rushes to the sea at the rate of 15,000 tons a second, and 10,000 men are called out to drive it on. But when the crops are growing, the Nile is but a brook coursing through the rocks, and the law lays rough hands on the peasant farmer who, under shadow of the night, dips out an extra bucketful of drink for his thirsty crops. Now modern engineering attempts to save some of the summer flood, that the cotton and grain may not shrivel up

Value of water.

in the torrid sun of the spring. It is cotton that makes modern Egypt a living land, for Egyptian cotton is known over the world as the best cotton grown. England has undertaken this great irrigation work in Egypt—of which the new dam at Assouan and the new barrage at Assiout are but the beginning—because England is vitally interested in the cotton trade.

Importance of cotton.

Cotton is the backbone of the commerce of England. From around the world—from the Southland of America, from Brazil and Peru, from far-away India, from the country of the Nile—a mighty fleet of merchantmen is bringing to Liverpool the harvest of many millions of acres of cotton fields. The voracious spindles and looms of Lancashire use a third of the cotton crop of the world. England, thousands of miles from the nearest cotton fields, weaves cotton for the world. The plodding Egyptian, with watchful eye on the rising flood of the great river, tends his crops in a garment made, perhaps, from cotton he picked the season before; but the workers who made the cloth were in far-off England.

The first cotton mill is yet to be erected in Egypt, but, with the added impetus given to Egyptian industry by the great engineering now being developed, it will not be long before agricultural Egypt will become manufacturing Egypt; and the long staple of the

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THE ASSOUAN DAM, ON THE RIVER NILE, EGYPT

—Vol. VIII, pages 2459-2467

Nile Valley will be spun and woven in Egyptian mills by Egyptian labor.

English financiers have the strongest faith in the future of Egypt. For centuries Egypt was practically a bankrupt country, but within the past few years, under able English administration, the finances of Egypt have been placed on a solid foundation. The best proof of this is found in the daily market quotations of Egyptian Government securities. The one man who may be well called the Financier of Egypt is Sir Ernest Cassel.

Finances of Egypt.

Sir Ernest Cassel's greatest work in Egypt has been the financing of the new dam. For years Egyptian engineers have gone up and down the Nile Valley projecting on paper wonderful schemes of irrigation. Lakes have been formed, canals dug, and great barrages thrown across the river—all on paper. All of these fine schemes, which proposed to turn the desert into a garden, were brought before the Egyptian Government, and the rulers applauded the engineers. But, when it came to providing funds for the carrying out of these plans for the saving of Egypt, the government was silent. Although Egypt is now on a sound financial footing, its financial arrangements are most chaotic. Nominally the vassal state of the Sultan of Turkey, the independence of Egypt is guaranteed by the Powers; but the financial administration is practically controlled by England. When Sir

The financier of the dam.

England in control.

THE ASSOUAN DAM, ON THE RIVER NILE, EGYPT

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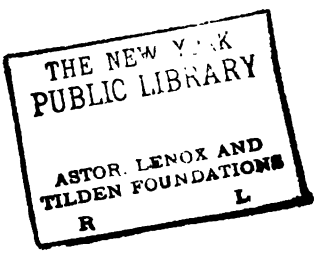
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Benjamin Baker, the distinguished English engineer of the Forth Bridge and the Central London Railway, placed before the Egyptian Government an engineering plan for the damming of the Nile at two points—six hundred, and two hundred and fifty miles, respectively—above Cairo, the government gave its approval to the scheme, which involved the expenditure of several million sterling. But the government was not able to pay for the work, except by small payments extending over a long period of years, and not beginning until the dams were in actual operation.

Sir E. Cassel's enterprise.

Undaunted, Sir Benjamin Baker went to his friend, Sir Ernest Cassel, and told him that several million sterling was needed to dam the Nile, and would he advance it? The engineer assured the banker that the project would be of inestimable benefit to Egypt, and that the two dams would rapidly pay for themselves in the greatly increased revenue they would bring to the Egyptian Government in water taxes. It did not take the banker long to decide. Four days later a contract had been signed with Sir John Aird, who is probably the greatest contractor in England to-day, to build the two dams within five years. Sir Ernest Cassel agreed to pay the contractor for the work as it was carried on, and an agreement was made with the Egyptian Government, by which payment for the work will be made to Sir Ernest Cassel in an

annuity of £160,000 a year, the first payment to be made in July, 1903. That the Egyptian Government will not only be able to pay the annuity, but will profit immensely by the new dams, is more than assured by the fact that the barrage at Assiout, already in operation, is now earning enough to pay the entire annuity.

The wonderful dam.

The dam at Assouan is a dam such as was never projected before. To build a great wall across an ordinary stream is merely a matter of labor, but to throw up a dam in the heart of a Nile cataract is a daring engineering undertaking.

Engineering difficulties.

"We had no idea of the difficulties we were to meet," said Sir Benjamin Baker to the writer, in describing the work at Assouan. "We were greatly hampered in the work at the beginning because of the uncertainties of the river bed. We had to crush one turbulent channel after another, to enable our thousands of workmen to go down into the bed of the river to excavate for the foundation. This work had to be done at High Nile to enable us to begin excavating as soon as the Nile subsided. In closing a channel, we first threw ton after ton of granite blocks into the cataract, and then we pitched in trainloads of

Rubble and sand.

rock, trucks and all. Gradually the rubble mound rose above the surface of the water. After the flood had subsided we banked this rock wall with many thousand bags of sand.

What a task we had to get those bags! We used eight million, and we had to search all Europe for them. When the floods rose again we anxiously watched the excavation ditch protected by these walls of rock and sand bags.

We had a score of great pumps ready to draw out the water should it rush in, but so well had our sudds been constructed that two pumps were as many as we needed.

"When we finally got to work in earnest in the bed of the river, we found the task was a more formidable one than we had imagined. The rock in many places was such as no engineer would think of building a dam upon. It was rotten rock that crumbled into sand under the pick. We worked down yard after yard looking for solid rock, and in some places we had to go forty feet below the bed of the river to find it. This enormous excavation, of course, greatly increased the cost of the work. When I saw that we would practically have to excavate a deep ditch through the river bed to get to solid rock, I told Lord Cromer I did not know how much it would cost, but it would be done. Lord Cromer said, 'Go ahead!'"

Rotten rock bed.

The work was carried on night and day through the winter and spring before the flood came rushing down the valley. An army of native labor was thrown into the ditch. At one time 13,000 men were at work on the Assouan dam. Despite the unexpected engi-

Number of men employed.

neering difficulties, the work has actually been completed a year ahead of time.

If private companies could go into Egypt, build great dams and irrigation works, and receive the revenue that they would earn, all the Morgans and Carnegies and Rothschilds would be rushing off to Egypt to build dams; for a dam in Egypt is a bigger money-maker than an Atlantic steamship line, or a steel works, or a beef combine. Lord Cromer roughly estimates that the dam at Assouan, which has cost about £2,500,000, will increase the agricultural earning power of Egypt by £2,600,000 every year. That is, the Assouan dam, High Nile or Low Nile, will pay for its entire construction every year. Lord Cromer estimates that the actual increase in the government revenue, because of an irrigation of an added 1,600,000 acres of land, will be £380,000; so that the Assouan dam will not only pay twice over the annuity of £160,000, but it will give a surplus of £2,500,000 a year to the country.

Yearly revenue.

[In 1903, Coronation Durbar at Delhi. First meeting of the new government opened in Pretoria. Hurricane in Society Islands (5,000 lives lost). Panama Canal Treaty signed at Washington (rejected by Colombia, Nov. 3, confirmed by the newly formed republic of Panama, Nov. 18). Protocols between Venezuela and the Powers signed in Wash-

ington. King Edward opened Parliament in state. First cable message received from Hawaii. Alaskan boundary treaty signed. Morocco imperial troops defeated. Blockade of Venezuelan coast raised. Chinese rebels massacre 500 imperial troops at Yang-Wing Pass. Protocol signed between United States and Venezuela for adjustment of claims. Popocatapetl volcano sold to an American syndicate. Work begun on Pennsylvania railroad tunnel in New York. Czar of Russia decrees religious liberty and local self-government. First through railroad journey across Asia and Europe from Vladivostok completed. President Castro of Venezuela resigns. Twenty-fifth anniversary of the Coronation of Pope Leo XIII. celebrated at St. Peter's. Mr. Chamberlain returned to England from his tour of the new South African Colonies. President Roosevelt made a speech in Chicago on the Monroe Doctrine and the need of a strong navy to support it. Chamber of Deputies consents to expulsion of religious orders from France. Tornadoes in Arkansas and Alabama. *Minnesota,* the largest steamship ever built in America, launched at New London, Conn. Massacre of Jews in Kishineff, Russia.]

Religious liberty decreed in Russia.

MASSACRE OF THE JEWS IN RUSSIA

(A.D. 1903)

ARNOLD WHITE

THE massacre of sixty-one prosperous Bessarabian Hebrews reminds Christendom that the Jew, with his eternal claim for justice, is still sitting at the gate. The Kishineff butchery differs in no detail from previous demonstrations of nominal Christianity against a race, physically inferior, but intellectually superior; proudly exclusive, but driven to money-lending as a career. Precedents for Kishineff are to be found in every old country. Signs are not wanting that if something practical is not done by the Powers to settle the Jewish question, the Jewish question may yet settle the Powers. Already their power is that of mediæval Rome.

Mediævalism in Russia.

The situation of the Jews in Russia to-day is almost identical with that which they occupied in England 600 years ago.

English statute law formerly provided that no Jew could enjoy a freehold. Seven hundred Jews were slain in London on the plea that a Jew had forced a Christian to pay him two shillings a week as interest on a loan of twenty shillings. Lord James Hereford's Money

Lenders' Act was anticipated in the Thirteenth Century by an English law which compelled every Jew lending money on interest to wear a plate on his breast signifying that he was a usurer, or to quit the realm. In 1290 nearly 17,000 Jews were banished from England, and other countries quickly followed her example.

At the end of the Fifteenth Century several hundred thousands of Jews were banished from Spain, Portugal, and France, but they were favored in Holland, a country which by their aid prospered commercially until the decay of national ideals during the pursuit of material gain reduced her to the fourth rank of nations. The Jews were subsequently allowed to return to the countries from which they were expelled, but it was not until October, 1868, that Spain consented to receive them. In 1650 Cromwell allowed the Jews to return to England, and from that time to the present day Great Britain has experienced the truth of Heine's saying that every country has the Jews it deserves. If England can boast of the best and most enlightened Jewish community in the world it is partly because English freedom and sense of fair play have met with the reward they deserve, and partly because hitherto the Hebrews settled in Great Britain have been too few to raise in a serious form the question that inevitably arises whenever the clever but timid few

Banishment of the Jews.

establish mastery over a muscular but stupid majority.

The pivot of the Jewish question in its modern phase was the partition of Poland. It was then that Russia acquired her Jewish population. Since the ten provinces of Poland were added to the Russian Empire the key to the Jewish problem is to be found on the banks of the Neva, not in London, Berlin, or Washington. During the first half of the last century the Jewish population in Russia was insufficient in numbers to rouse anti-Semitism. Oppressive laws against the Jews were partly suspended, and in 1862, under the Tsar Alexander II., additional political privileges were even granted to the Jews in Russia and in Poland. Persecution of Jews, however, was reported in Rome in 1864, at Bucharest in 1866, while the *Judenhetze,* begotten by Bismarck, opposed by Mommsen, Virchow, and others, and censured by the late Emperor Frederick, was born in Berlin in December, 1880. The German anti-Semitic League was formed and a petition was presented to Bismarck to restrict the liberty of the Prussian Jews. Almost immediately afterwards the Jews were severely persecuted at Kieff and at other places in South Russia. So great was the persecution in Prussia that the old Emperor William interfered to stop it.

Polish Jews enter Russia.

Persecution of the Jews.

Following German example a severe restrictive edict against the Jews in Russia was

issued in May, 1882, but was not fully carried out; their civil disabilities were increased. In 1883 there were violent attacks on the Jews in Presburg in Hungary, where martial law was proclaimed. There were also attacks on Jews at St. Petersburg, Pesth, and Zala-Egerszeg. In 1884 Russia appointed a secret commission under the presidency of Count Pahlen to inquire into the condition and rights of the Jews. Count Pahlen was a man of enlightened mind and humane temperament. The recommendations of the commission were not adopted, and in 1890 the severe edicts of May, 1882, long threatened, were fully enforced against the Jews in Russia. The first effect of the enforcement of this edict, generally attributed to Monsieur Pobedonostzeff's influence over the late Tsar, was to "round up" all the Jews who had been living in Russia proper and to drive them into the Ghetto of the Fifteen Provinces. This zone or pale was set apart by Russia in 1843 as a place outside which Jews were not allowed to dwell unless exempted by express authority from the operation of the law. This zone of the Fifteen Provinces includes a territory considerably larger than France. The "Novoe Vremya" in a recent article inquired: "What more do the Jews want than to live in a territory larger than France?" The answer is simple. The Jews of the pale are only permitted to live in towns, bourgades, and villages set apart for the

Severe edicts enforced.

purpose. They are not allowed to settle on the soil; to buy, own, or cultivate land. The consequence is that the actual space occupied by the Russian Jews, so far from being larger than France, is smaller than the smallest French department. Since 1843 not an inch has been added to the territory set apart for the dwelling-place of the Jews; in the same period the Jewish population has quadrupled. So prolific are the Hebrew subjects of the Tsar that the Jewish population increases more rapidly than the Slavs, and the menace of the Jewish cradle is even more feared in Russia than the military genius of the British War Minister, or the shooting of our Home Squadron.

Small territory for large population.

So great is the pressure of the population upon the means of existence in the pale that of the 600,000 resident Jewish artisans there is not work for more than half that number. Wages run as low as fourpence a day; and so great is the destitution that many Jewish families—even the women—do not possess among them one single article of linen or cotton. A wealthy Jewish friend of mine recently founded a laundry in the town of Wilna. He told me that from investigations made into the condition of the Jewish population he found that even the women in many instances had no linen whatever, while as regards the men, one shirt would belong to a whole family. There was no Jewish linen to wash, and

Poverty of the Russian Jews.

this is not from uncleanly habits but from sheer want. This absence of proper clothing is accompanied by perpetual privation in food. The stamina and power of lasting under adverse circumstances, characteristic of the Semitic race, enables the miserable and impoverished Jewish population of the pale to exist on a diet and to withstand insanitary conditions of life which would destroy the peasant or artisan of Anglo-Saxon stock.

When I visited Berdicheff I saw what seemed to be a city of dreadful night. It is one dead level of gloom, decay and silence. The neglected streets are almost impassable from waterholes. Ordure lies untouched, festering in the sun or washed by the frequent rains. The very animals are affected by the blight that hangs over the town. The droskies and carts are falling to pieces, the ribs of the horses stand out. Emaciated dogs prowl about in search of food. The trade of the town is unable to afford sustenance to more than a portion of the population. The children are old and sedate; the men in long gabardines are ghoulish. In Berdicheff thirty or forty manufacturers might make a living. The number exceeds 500, while wages run as low as fourpence a day. Broken lattices, unpainted doors, peeling stucco, tell of the lack of hope. The filthy inn reeks with the stench of neglect. The only ray of hope comes from the synagogue and the doctor. Even the hospitals are

A city of dreadful night.

converted into engines of oppression. At Homel I saw eighteen men and women suffering and dying together. Cases of cancer, puerperal fever, Bright's disease, meningitis, fracture, amputation, tumor, and fever lay hustled on dirty cubicles, irrespective of age or sex.

This is the Jewish question.

There are about five and one-half millions of Jews in Russia, the majority of whom suffer the pangs of want and misery from inability to earn a livelihood. The sustenance they absorb, though sufficient for life, is insufficient for health. The inability of the Russian Jews to earn a livelihood arises from the pressure of the May Laws which debar them from resorting to the customary avocations of Russian subjects and drive them into channels of commercial enterprise which engender unpopularity and kindle the fires of anti-Semitism.

It is not from innate brutality that the Russian Government herds the Jewish pedlar, money-lender, and artisan into ghettos and restricts him from fishing, tillage, or market-gardening, but because the Russian Government deems itself compelled both by policy and by duty to protect the majority of the Russian population from contact with the astute, temperate, industrious, and money-loving Jew. The Russian peasant is a primitive creature. He is religious, faithful, brave, strong, and simple. He succumbs to tempta-

The Russian peasant.

tions dangled before him in the shape of loans on terms he does not understand. Debtors in Russia, as elsewhere, are more numerous than the creditors. The law is on the side of the latter, but when men lose their all, an obsession of fury takes hold of them; they "see red" and seek the destruction of the ledger as evidence of the debt, and the murder of the creditor, who is as a rule their physical inferior. Men with muscle and the sword will not voluntarily pay tribute or come under the heel of the most intellectual race in the world if the physique of the latter is inferior to their own. The Bengali can pass examinations and the Moslem cannot; but if the English left India the Mohammedans would make short work of the money-lending babu.

This is the true origin of the Kishineff massacre. It is not sufficient to speak of anti-Semitism or of innate Russian brutality as its ultimate cause. Young girls were violated, children were murdered, Jewish corpses were eviscerated and stuffed with feathers by men who cared no more for the doctrine of the Jewish religion than for the practice of their own, and they were instigated to their fiendish work by those who hated the Jews for more practical reasons than those of race or creed. Russian brutality.

The mere racial difference between the Jew and the Slav is not enough to account for the secular antagonism between them. There is as much difference between the Russian and the

denizens of the Khanates as between the Russian and the Jew. But the difference between the latter cuts deeper. It touches the foundation of human society. The Russian does not desire the Jew as his brother-in-law, and the Jew proudly refuses to marry outside of his own community. Other races intermingle.

Aloofness of the Jews.

The aloofness of the Jews in Russia is carried to a point which may be understood by Englishmen if they will study the language, the habits, and the customs of the foreign inhabitants of the ghettos which have been already established in our largest cities. One hundred and twenty million Russians will never, while life remains, accept the domination of 6,000,000 Jews, whatever may be the claims of justice, or however mournful the wail of humanity. British editors who want facts might note this one.

Reason of Russia's opposition to the Jews.

The Russian case for restriction is accordingly by no means so impractical as we are led to imagine by Jewish writers in the English and American newspapers. If the barriers between the Russian moujik and the Jewish money-lender were thrown down, and the Hebrew subjects of the Tsar were allowed to compete at the universities, to mingle with the peasantry, and to enjoy all the privileges of Russian citizenship, one of two results would follow. Either every good place in the Empire would be held by a Jew in peace and quiet, and the peasant, by the mortgage of his

property, would tamely transfer Russian soil into the hands of the Jewish community, or the Kishineff massacre would be repeated a hundred times over on a gigantic scale. Rather than share the fate of Holland Russians would sacrifice every Jew in the Empire. This may be sheer wickedness, but it is simple fact. Even in India the Jews in the Civil Service are never spoken of as "Sahib" by the Moslems—always as Jew. Jews in India.

These are the considerations that compelled Russia to set her face like flint against the representations of the Lord Mayor of London, in 1891, and to regard the contemplated action of President Roosevelt in 1903 as calculated to injure rather than to benefit the Jewish cause.

[Steamship Saginaw sinks in collision off Fortress Monroe. Jews massacred in Bessarabia. Fire in Ottawa. Strike riots in Valparaiso, Chili. Anti-Hungarian revolt in Croatia. Prof. A. W. Goodspeed, of University of Pennsylvania, discovers that the human body emanates rays by which photographs can be taken in a dark room. Blizzard in Montana destroys $5,000,000 worth of live stock. Conflagration at St. Hyacinthe, Quebec, destroys 300 buildings (3,000 homeless). Tornado in Southern Nebraska. King Alexander, Queen Draga, and their staff murdered in the Royal Palace, Belgrade, and a provisional government formed.]

A GLORIOUS REVOLUTION IN SERVIA

(A.D. 1903)

HERBERT VIVIAN

IN olden days all sovereigns, however much they might differ in questions of policy, however greedily they might covet each other's dominions, still recognized a practical brotherhood, a common interest in the maintenance of authority. Wrongs done to any one of their order were resented as an outrage to all; the demise of any Crown plunged every civilized Court into mourning. Now another spirit seems to prevail: save in Russia a mask of diplomatic indifference is worn in high places, and the expression of national sympathies is left to the man in the street. A bloody tragedy, almost unparalleled in the history of civilized man, has occurred in a European capital. A patriotic young king, his fair consort, his chief ministers, and his faithful servants have been butchered with inhuman atrocity; the murderers have gloried in their infamy; and a terrorized populace has seemed to acquiesce with decorated houses and blaring bands. No thrill of horror has been manifested by the "dear brothers" and "cousins" of the royal victims; on the very day of the

Diplomatic indifference.

holocaust, when the mangled corpses of a King and Queen were being exposed to the outrages of frenzied fiends, there was never a pause in the pomp and circumstance and revelry of European Courts. But the ghastly details of the deed have appealed to the melodramatic instincts of the vulgar, arousing a morbid indignation throughout every land.

What honest person could fail to be stirred by the story of the conspirators, sitting over their wine under the verandah of the Srbski Kruna, uproariously urging the gipsy band to play Queen Draga's March before they sallied forth to hack her to pieces with their swords; by the airy apologies of the baffled murderers when they roused a citizen for axes and candles, wherewith to track down their victims in the sleeping palace; by the thought of the ill-starred young sovereigns lying in their own gardens, riddled with bullets, sighing through the small hours for the long-delayed relief of death? In the pages of ancient or mediæval history, even in sensational fiction, such hellish horrors could not fail to arouse intense emotion: in the cold glare of the Twentieth Century they are brought home so vividly that we are almost eye-witnesses. The question remains whether democracy or oligarchy shall pass judgment; whether public sentiment or political opportunism shall prevail. Under international lynch law, Servia would already have been put to the sword. But your sober

The King and Queen assassinated.

diplomatist is ever eager to let ill alone. Times have changed since exaggerated rumors of repression in the Christian provinces of Turkey could stagger ministries or invoke European wars. Enthusiasm in high places is dead, and facts must be faced. The first of these facts is that civilized governments are moved only by self-interest, whether it be a chance of national aggrandizement or an instinct of self-preservation. But the peoples retain power to insist upon justice as well as injustice, and they must surely now raise their voices or for ever hold their peace.

Self-interest the keynote of governments.

The Servian outrage preaches many lessons in political philosophy. It presents the issue between anarchy and international action. Almost anywhere in Europe to-day, the humblest and most infamous are protected. To kill an armed burglar may be brought in manslaughter; injured honor can only be avenged by civil process. But a handful of besotted desperadoes may wipe out a dynasty, and the partisans of some obscure pretender will acclaim them as heroes.

Lessons taught by the Servian outrage.

Let us consider the career of King Alexander and Queen Draga, and even admit for a moment all the most heinous charges which have been alleged against them. To what do they amount? Let us hear the Devil's advocate. He may tell us that the King was autocratic, that the Queen was autocratic and immoral, that a conspiracy was afoot to proclaim her

brother heir-presumptive. I do not believe any of these charges, but even if they could be proved up to the hilt, they would not justify massacre or even exclude pity. The question of the succession was an open one. For the House of Kara George, there remained no living descendant of an Obrenovich ruler. It was important to choose an heir, and every one was free to make suggestions as his conscience might prompt him. The Prince of Montenegro fostered a handful of partisans, but his election would have meant a subjugation of Servia, and those who resent autocracy would have found his little finger thicker than the loins of King Alexander. Prince Mirko was mentioned, and he possessed a claim as well from his own personal qualities as from his marriage with a beautiful and accomplished cousin of the Royal House, Mlle. Constantinovich. Various old families, descended from the Voivodes, might have furnished plausible candidates. The question was so widely open that there could have been no treason in any suggestion, whether it came from the gutter or the palace. If the King and Queen did propose Nikodem Lunevitsa, it does not follow that they were unpatriotic. A woman will run risks, perhaps even sacrifice her honor, for the child of her loins, but who ever heard of one who went out of her way to invite odium for the sake of a brother? The fraternal relationship is sometimes friendly,

Question of the succession.

but never romantic. When I conversed with Queen Draga, I was vastly impressed by her conspicuous common sense, a quality as rare as it is attractive in the fair sex. If she had not had confidence in her brother, she would never have dreamed of suggesting his succession. Assuming he was undesirable, he would either have become a conspirator during her husband's life or failed to hold his own when the time came for him to ascend the throne. She had nothing to gain unless he possessed the markings of a strong king.

Queen Draga's common sense.

Nor would King Alexander have assented to the nomination of an unsuitable heir. He loved his wife intensely, he was only happy when he pleased her, but he never sacrificed the good of his realm and people to her whims; nor indeed was he ever called upon to do so. I have seen him a hundred times, I have conversed with him intimately, and I believed I gauged his character with some accuracy. He was above all things a patriot; he labored incessantly, unremittingly, with infinite pains and brilliant foresight, to do his duty to his people. He must have known his brother-in-law's character, and would never have dreamed of encouraging hopes of inheritance unless he was absolutely convinced of the young man's efficiency. That being so, the charge amounts to this: the King and Queen proposed to nominate an heir who was worthy of occupying the throne. It must be remem-

Character of King Alexander.

bered that he came of an old Voivode stock, and was anything but an upstart. Many Servians have said to me that they welcomed Draga as their Queen because, instead of being an expensive alien princess, she was the offspring of their national heroes, the cherished patriotic ideas, she had simple tastes, and she could enter into the feelings of the nation whose blood was in her veins. What could be argued in her favor was equally applicable to her brother. At any rate, he would not come to them as a stranger, like the Princes of the Black Mountain, who were cousins rather than sons of Servia or the descendants of Black George, who had forgotten much and learned nothing during years of ignominious exile. To propose him to the national assembly as heir may have been a blunder, but it was certainly not a crime.

Queen Draga a true Servian.

Likewise the clamors against the Queen were mere sporadic explosions of jealousy. In every country ruled by a young and charming Prince many hearts flutter with extravagant ambitions. A bevy of beauties adorned the Servian Court when Queen Nathalie presided over its destinies. If ever the King engaged one of them in conversation for a few minutes longer than another, all manner of rumors were instantly set afloat. Had he married a foreign princess, as the German Emperor arranged, his Queen would have commanded respect as a being of a superior caste,

and assuredly if her blood had been shed it would not have cried for vengeance in vain. But when the news came that he had chosen a daughter of his own people to share his throne, a hundred damsels protested their own superior charms, wagging their tongues in impotent calumnies unceasingly. In ordinary life and ordinary countries, the expression of such disappointment is short-lived. But at Belgrade it gathered volume every week and month and year, though the simple, modest, genial Queen certainly did nothing to feed the torrent. She had her own views of political right and wrong, and her character was strong enough to support them. But no impartial critic could blame her public actions. As for her private life before she ascended the throne, it concerns no one but the King, who gave her his love, and the people who acclaimed her as enthusiastically as they now acclaim her butchers. Had she been the most abandoned of her sex in the days of her poverty, it were only charitable to pass the sponge of oblivion over her past, remembering only that she enjoyed the confidence of her Consort, and shared, perhaps even inspired, his labors for the national welfare.

Character of Queen Draga.

Queen Draga's force of character.

The charge of despotism is more important. She certainly exercised considerable influence over her loving lord: no one with her square chin and decided views could play the puppet

even in an Oriental land, where the subjection of women remains almost an article of faith. In every Servian household, except the few diplomatic families, who have acquired exotic ideas, wives and daughters are expected to fetch and carry, remain standing in the presence of their men, and dine together on the fragments that remain after dinner. It is easy to imagine the horror likely to be aroused among men brought up in such an atmosphere when they heard that their King actually consulted his consort on the affairs of state, had even been known to take her advice. The shock to the nation would be infinitely greater than if all the slanders of disappointed damsels had been proved in open court. The fact that her counsels were wise and moderate and generous would in no way extenuate the enormity of her presumption in holding opinions at all. Open immorality might easily have been condoned, but character and courage in a woman were held to be positively indecent. Yet her influence was always on the side of harmony and kindness. King Alexander, like every one else, could not fail to realize the national need of strong government, but he made every allowance for the prejudice of his subjects. His ear was always open to any man or party with a grievance; he was readily accessible to all classes, and listened with the utmost patience to every suggestion; and the mass of the people was by no

Position of Servian women.

means ungrateful. Wherever I went in my travels through the country, I heard nothing but good of him; praise of his tact, admiration for his talents, enthusiasm for his warm heart and personal charm.

Popularity of King Alexander.

The late revolution was not the handiwork of Servia. It was engineered by the low cunning of a handful of discredited ruffians. Examine the list of conspirators and provisional ministry: not a single name is associated with an honorable career or any deed of distinction. Jail-birds, bankrupts, needy lawyers, and gutter journalists are the new rulers of Servia, maintained in parlous authority by a gang of drunken young officers, half-maddened by their taste of blood. We are not to believe that the nation, or even the army, participated in the recent crime. The nation knew nothing of it until the whole tragedy was over. Then a reign of terror set in and the unarmed populace was impotent to protest; even the decencies of mourning were forcibly prohibited and orders were carried out enforcing signs of hollow joy. In every town and village the prefects and their subordinates were compelled to do the work of regicides and coerce opinion. It is impossible not to marvel over the diabolical craft which has ordered the after-effects of the holocaust. No man in Servia could call his soul or his thoughts his own. The faintest show of disapproval would have meant instant death. I

The low perpetrators of the crime.

know that at least twenty private citizens were put to death in Belgrade within the first few days of revolutionary rule. The simple procedure was to enter a man's house, shoot him through the head, and then calmly announce that he had committed suicide for some disgraceful reason. The whole story reads like a grossly improbable romance. I could understand a people being terrorized by a determined army, but it seems almost incredible that a people and an army should have been so completely overawed by a few hundred desperadoes. None of the superior officers knew anything of the plot; the privates had to obey orders when they surrounded the palace, and, until the deed was done, they probably imagined that they had been called out to protect their King. Even when they learned what had happened, they were without leaders or initiative and were forced into a sullen acquiescence. Many officers were horror-struck when they heard what had happened, but it was too late to do anything, for all the army organization was in the hands of the conspirators. One faithful Colonel, Miloslav Zhivanovich (let his name go down to posterity), was found to have warned the King. He was shot in cold blood, and the news went forth that he had committed suicide in consequence of pecuniary troubles. Another officer, Lozar Jovanovitch, who refused to rejoice over his master's murder, was

A reign of terror.

run through the body, and his assassins announced with grim cynicism that he had killed himself in mortification because he was deemed unworthy to participate in the "gallant deeds" at the palace. When the thanks of Parliament and the blessings of the Metropolitan are showered upon the "brave Servian army," those insults are not directed to the nation under arms, but to a small clique of criminals.

Not content with taking King Alexander's life with revolting savagery, the criminals set to work to traduce his memory. They remind me of the regicide Harrison, who said of King Charles I., "Let us blacken him." Mashin and his fellow-murderers have expended infamous ingenuity in blackening their royal victim. King Alexander died fighting for his Queen; they represent him cowering in a cupboard. He was a Prince of singular wisdom and prudence; they suborn physicians to declare that his brain betokened incipient lunacy. They have gone on to discover all manner of compromising documents, which they had evidently forged and themselves placed in the Palace. Journalists and historians are often too ready to accept the first story that comes to their hands. In judging of calumnies against the unfortunate victims of the Servian tragedy, they will do well to hesitate before they receive the tainted evidence of crafty criminals.

Blackening the royal victims.

[Floods and conflagrations in Kansas and Nebraska. Tornado wipes out Gainesville, Ga. Prof. W. Markwald, of Berlin, exhibits his newly-discovered metal, polonium. Explosion at the lyddite manufactory, Woolwich. Prof. Curie lectures at the Royal Institution on Radium. King Peter Karageorgevitch, the newly elected King of Servia, enters Belgrade after an absence of 45 years. Khedive of Egypt visits Sir Ernest Cassel in London. Railway accident in Spain on the Najerilla River (200 lives lost). Visit of M. Loubet to King of England. King Edward entertains officers of the U. S. Squadron at Buckingham Palace. Death of Leo XIII.] Death of Leo XIII.

LEO XIII. A RETROSPECT

(A.D. 1903)

WILLIAM BARRY

AMID tokens of world-wide sympathy and profound admiration, Leo XIII. has passed away. He belonged to a remarkable group of sovereigns and statesmen, including Mr. Gladstone, Prince Bismarck, and the Emperor William of Germany, whose vigor lasted down to extreme old age and whose period of active life bridges the interval between our own day and the far distant times of Napoleon. That the late Pope in his twenty-five years accomplished a momentous work has been admitted on all hands. Critics by no means partial to him acknowledge "the blameless life, the lofty ideals, and the indomitable moral courage" that were to Catholics a subject of legitimate pride or devout veneration. It is even granted that, thanks to his diplomacy, the Vatican wields an "influence in international politics which it has not possessed since the Middle Ages."

Statesmanship of Leo XIII.

He succeeded in pacifying the great Protestant Empire; he recovered the confiscated revenues of many years; he was on terms of friendship with William I. and Frederick

III.; and at last of affectionate intimacy with William II. Men were not a little touched, as the Pope lay on his death-bed, to hear that the German Emperor had publicly offered up a prayer for his restoration. When we think of another Leo in 1520 and of Luther burning the Papal Bull at Wittenberg, we find such an incident significant of great changes. The Kulturkampf has ended in a reconciliation, which, whether at Rome, Strassburg, or even Jerusalem, promises well for the peace of religion that is yet to come.

For all this Leo XIII. deserves to be held in everlasting remembrance. His action may have been daringly political; his motives were such as become the *Servus servorum Dei.* But when he turned to France, the questions which confronted him were of appalling magnitude and difficulty. France was the foremost of Catholic powers, yet in its government the spirit of a persecuting Atheism had prevailed since the failure of the Royalist *coup d'état* on May 16, 1877. Acting on Gambetta's dictum, *"Le cléricalisme, voilà l'ennemi,"* M. Jules Ferry proposed and carried his famous decrees of 1879 by which every religious congregation in the land was to be broken up."

Royalist *coup d'état* on May 16, 1877.

In a letter to M. Grévy, May 12, 1883, Leo deplored the banishment from the public schools of religious teaching, which was also excluded from the hospitals, the armies, and

the charitable institutions of France. He could not but lift up his voice against the new law of divorce. He was grieved that the clergy should be taken from the holy place to serve as common soldiers, while they were not permitted to exercise their sacred duties as chaplains or almoners. M. Grévy replied that the clergy had themselves to thank if anti-religious passions had been aroused: were not large numbers of them hostile to the Republic from its beginning? To this the Pope answered in February, 1884, by his remarkable letter, *"Nobilissima Gallorum gens."* It made a deep impression; but domestic strife continued; the name of Dupanloup, whose life had just been published, was a signal for fresh combats; and the Cardinal of Paris summed up five years of incessant attacks on faith and morals in a melancholy but ineffective appeal to the President. What could be done to arrest the ruin of Christian France?

Leo XIII. and France.

Catholics must accept the new order as a fact, and make the best they could of it; such was the conclusion at which Leo XIII. arrived in 1885; such was the practical issue of his teaching in the *Immortale Dei.* He would not put an end to the Concordat. He held by the union of Church and State as in principle necessary.

In France every one asked whether Leo XIII. had inspired or permitted the Car-

dinal's action. It was known before long that he approved of it. The new Secretary of State, Cardinal Rampolla, wrote in November to the Bishop of St. Flour, that French Catholics would do well to acquiesce in the situation and imitate the conduct of the Holy See. In reply, the five French members of the Sacred College accepted the Republic, but protested against its encroachments on spiritual territory. To them Leo addressed an epistle, written in their own tongue, which left no room for hesitation (*Au milieu des solicitudes,* Feb., 1892).

From what we have said it will appear that Leo XIII., in recognizing the French Republic and urging on Catholics the duty of citizenship, could appeal to principles and precedents which have in them no taint of Jacobinism. But a situation full of trouble was laid open when the political problem had thus been happily solved. The last quarter of a century bears in many ways a resemblance, which cannot fail to strike thoughtful students, to the years of Socialist propaganda before 1848. Rights of property; wrongs of proletarians; progress and poverty; the iron law of supply and demand; the living wage; the housing of the poor; the Sunday rest: we have been working on this treadmill as others in their time, from Lamennais and Pierre Leroux, from Saint Simon and Robert Owen, to Lassalle, Karl Marx, and Henry George. Social unrest.

On all hands Leo XIII. set up schools, seminaries, and universities, from Washington to Fribourg and Beyrout. To English Catholics he threw open Oxford and Cambridge. He founded in Rome National Colleges. He unbarred the Vatican archives. In calling up John Henry Newman to the Sacred College he was not only distinguishing a saintly and most winning personality, but extending the protection of the Holy See to works at once original and profound, which are telling more and more upon the development of apologetic literature. His encouragement of Oriental research was a step in the same direction. Significant also was the naming of a commission to guide and control Bible studies, now conducted on lines rather of archæology and criticism, than of Patristic exegesis. The Holy Father took a deep interest in all that regarded the Churches of the East. But his Constitution *Orientalium* marks a return to the ideas of Benedict XIV., who dealt tenderly with these ancient memories. Our Liturgy has been enriched with many offices, binding Rome with Alexandria and Jerusalem, or exhibiting in their devotion to the Holy See men like SS. Cyril and Methodius, the founders of Slavonic literature and civilization. And if the Pope could not, in like manner associate the present Anglican Church with Roman orders, or recognize its hierarchy, at least he convinced Englishmen of

Activities of Leo XIII.

his goodwill toward them in documents which breathe a spirit of sincere religion, as many have felt and acknowledged who are outside the orthodox pale.

We make no attempt even to summarize the endless activities of a ruler who founded some two hundred and fifty bishoprics, signed over twenty concordats, and touched on every question as it arose, from agrarian troubles in Ireland to the religious needs of Japan; from "Christian Democracy" to "Americanism"; from the slave-trade in Africa to the establishment of diplomatic relations at St. Petersburg. The perplexed and ever more grievous condition of the Church in France would demand a volume to itself. The Temporal Power, though no longer in existence, has determined a whole series of vicissitudes in European politics. Every country has claimed attention from this great ruler, whose strength appeared to be as inexhaustible as his vigilance was unsleeping.

The Church in France.

Pius IX. saw the old order come to an end; Leo, with his measuring-rod, traced the new. Politics, in some high Christian sense, were the special province of a man who represented, like Innocent III., the genius of Roman Law, and whose training had been from early youth among aspirants to the Curia. Vincent or Joachim Pecci was a Volscian of Carpineto, not very distinguished in point of birth; educated first in the Jesuit school at Viterbo, and

afterwards at the Roman College, where he was remarkable for his elegant Latin and his brilliant display of logic. He had been admitted to the Collegio dei Nobili; at the Sapienza he became Doctor of Laws. In 1837 he received the mantle of a Monsignore; and in February, 1838, he was named Governor of Benevento. It is well known that he put down brigandage in this unruly district with a strong hand. Gregory XVI. sent him to Perugia in the capacity of legate, and then of bishop; but an excursion beyond the Alps, as nuncio to the Court of Brussels from 1843 to 1846, enabled him to catch a glimpse of London and Paris, while it facilitated an acquaintance with the French language that told upon his reading by and by. He was not, however, proclaimed Cardinal until 1853; and he spent in his mediæval palace on the Umbrian hill no less than thirty-two years of almost unbroken seclusion.

Early life of Pecci.

Negative conditions had been clearly laid down by Pius IX., but there was need of a constructive policy which must take into account the changes of a hundred years. When that unexampled reign ended in February, 1878, the Holy See had lost its temporal dominion; it was at variance with the French Republic, as well as with Russia and Germany; the Kulturkampf had been raging for years; there was an Armenian schism in the East, an old Catholic party in Bavaria,

Position of the Holy See.

Baden, and Switzerland; the Freemasons governed in Belgium; and at Monte Citorio laws were passed which hampered or impoverished the Church in Italy. Pius IX. has been compared to Louis XVI., and in some respects not without cause. He was equally well-intentioned, as he was equally unfortunate. But the chief point of resemblance is that both witnessed the downfall of an ancient order of things. In Papal history 1870 corresponds to 1789 at Versailles. Whatever comes after these dates in their respective chronicles belongs to a new age, divided from the old by a revolution in the thoughts, the spirit, and consequently in the laws by which men are directed.

Who should succeed Pius IX.? Outside of Italy no name, except perhaps that of Cardinal Bilio was familiar to the public. But observers at hand, among whom Ruggiero Bonghi held a memorable position, had fixed on the Bishop of Perugia; and, still more significant, had prophesied the coming alliance between the Church and Democracy. How in September, 1877, Cardinal Pecci was made Camerlengo, thanks to the strenuous efforts of certain of his colleagues; how the King died at the Quirinal and the Pope at the Vatican within a few days of one another; how the Italian Government took measures to insure the freedom which was indispensable to the Conclave; and how, after three scru-

Cardinal Pecci made Camerlengo.

Cardinal Pecci is elected Pope.

tinies Leo XIII. was elected by forty-four votes out of sixty-one—all this we may read in the current biographies. The new Pontiff was entering on his sixty-eighth year; neither himself nor the Sacred College anticipated a long reign. But opinion, Protestant no less than Catholic, ratified the choice.

Before long the world was considering with extreme curiosity a figure which recalled the great Italian Popes and politicians in their most characteristic features. Slight, pale, with burning eyes and slow gesture, Leo was neither an impromptu speaker, like his predecessor, nor quick as he had been at repartee, nor personally so attractive to Romans or strangers. But he had the strength which comes from self-control, inspired by a clear view of principles. He wrote a delicate and suggestive Latin; he knew his Dante by heart; he was an Umbrian, one might almost say Franciscan, whenever he touched on the Middle Ages; and his philosophy was drawn from the Angelic Doctor whose vivid light sheds a charm on the world of abstractions amid which he moves. As regards German thought, English or French literature, and the way in which Anglo-Saxondom manages its affairs, the Pope could learn what was needed only from experts; his training had not carried him in these directions. Diplomatic by temper, he saw the situation, as Italians commonly see it, without haze and sub-

Talents and characteristics of Leo XIII.

ject to no misgivings. But St. Thomas had taught him the art of distinctions, while any adjustment with present circumstances required a willingness to treat which had never been foreign to his temperament.

That the Church must be governed on a policy of some kind, which cannot fail to influence nations as well as individuals, is obvious from her history and constitution. But it should be no less evident that, whatever may be thought of such an *Imperium in imperio,* she is utterly dependent for its maintenance on the moral forces at her disposal. When Leo took possession of the Vatican, he had nothing to rely upon except the belief of Catholics in their Supreme Pastor, and the effect which they chose to give it by their public or private action. During his reign, the second longest in an astonishing history, not a sword has been drawn on his behalf; Europe, with a cynical disdain for justice, has declined even to guarantee the Pope's independence. He may be shut up in his palace or thrust out of it by a troop of *bersaglieri* when the Italian Government shall so decide. Without fleets or armies, with no assured revenue, protected by none of the Great Powers, Leo found himself at the head of a Voluntary System in which he could not move a step unless the people went whither he directed them. He was a preacher of righteousness, and he could be nothing more.

Not a sword drawn in the Pope's behalf.

[King Edward and Queen Alexandra visit Ireland. Cardinal Sarto, Patriarch of Venice, elected Pope (Pius X.). International Conference on Wireless Telegraphy opened in Berlin. Trial of the Humbert family begun in Paris. Coronation of Pius X.]

THE NEW PONTIFICATE

(A.D. 1903)

J. MOYES

AT ten minutes past four on the afternoon of Monday, July 20th, Leo XIII. breathed his last. On the evening of Friday, July 31st, the Cardinals, sixty-two in number, entered into conclave, and in the forenoon of Monday, August 4th, at noon, at the seventh scrutiny, it was found that Cardinal Joseph Sarto, Patriarch of Venice, was elected. The white *sfumata* gave the signal to the world outside, and Cardinal Macchi presently announced the election from the loggia of St. Peter's in the traditional form:

Magnum gaudium annuntio vobis. Papam habemus Reverendissimum Dominum Cardinalem Josephum Sarto, que sibi nomen imposuit Pius Decimus.

The Papal Conclave.

Thus, after a conclave of less than three days, carried out with vigorous observance of the wise and stately regulations with which the Church safeguards the Sacred College in the discharge of this, its highest function, and under conditions of liberty, solemnity, dignity, and piety, which left nothing to be desired, a new chief pastor was given to the Church and

a new name added to the majestic roll of the Vicars of Christ, which spans the centuries from the days of Pentecost to the present time.

The new Pope, like many of his illustrious predecessors, is of humble origin. In his elevation to the most sacred and most exalted dignity upon earth, the Church, true to the example of her Founder, has shown herself "no respecter of persons." She has too profound a sense of real greatness and of the stupendous importance of the issues at stake to have time to think of those puny considerations of social caste, to which minds of the small and worldly type are apt to attach importance.

Giuseppe Sarto was born on June 2, 1835, at Riese, a small village of some 800 inhabitants. Riese is in the diocese of Treviso, and the cathedral city of Treviso, with some thirty thousand inhabitants, lies about seventeen miles north of Venice. His father was a minor municipal official and his relatives are still innkeepers or shopkeepers of humble and honest standing. In his earlier years, Giuseppe Sarto was sent by Don Tito Tusarni, his parish priest, to school at Castelfranco, to which he walked daily on foot from Riese. Later on Cardinal Monico and Mgr. Farina, Bishop of Treviso, obtained for him a place in the diocesan seminary of Padua. On the 18th of September, 1858, he was ordained priest. For nine years he was made parish

Early life.

priest of Salzano, where he labored for nine years more. Both at Tombolo and Salzano he is said to have been idolized by his parishioners, and to have been remarkable by his practical sympathy with the laboring poor and the intelligent zeal with which he entered into their difficulties, and not only helped them, but did what was still better—taught them to help themselves. Mgr. Zinelli, the Bishop of Treviso, used to say of him: "I have never known a thinker or a writer more ready and more industrious." In 1875, in recognition of his services, he made him canon and chancellor of the diocese. Impressed by his intelligence and priestly spirit, the bishop entrusted to him the office of spiritual director and religious instructor in his diocesan seminary. Thus, after eighteen years of training in the parochial ministry, he was called to the practical work of the formation of the clergy. On the death of Mgr. Zinelli, he was appointed Vicar-Capitular, and had his first experience of the government of a diocese. His administration was a marked success, and on November 10, 1884, he was appointed Bishop of Mantua. The diocese is said to have been transformed under his stimulating rule and influence. It was at Mantua, in 1886, that he presided with distinction at the festivities organized for celebration of the centenary of St. Anselm, and he was brought into sympathetic touch with one of the great glories

Sarto becomes Bishop of Mantua.

of our Catholic past. The conspicuous ability and merit of the Bishop of Mantua did not escape the vigilant eye of Leo XIII., who forthwith marked him out for a higher eminence and a wider sphere of labor. He was summoned to Rome, and on June 12, 1893, was made a Cardinal of Holy Roman Church, under the title of San Bernardo delle Terme, and three days later, June 15th, was created Patriarch of Venice. At Venice, his charity, tact, and affability made him unboundedly popular. His influence made itself most happily felt, both in raising the tone of ecclesiastical spirit and discipline, and in winning the masses of the laity to the cause of the Church. When King Humbert and Queen Margherita visited Venice, the Cardinal went in his gorgeous gondola to pay them his respects; and as recently as April last (1903) he blessed the foundation stone of the new Campanile in the presence of the Count of Turin and Signor Nasi, the minister of public instruction, and in the course of an eloquent speech made a graceful allusion to the historic glories of the House of Savoy.

Cardinal and Patriarch of Venice.

It is thus by nine years' life and work as a simple country curate, nine years more as a parish priest, nine years more as a bishop, and ten years more as a cardinal patriarch that Pius X. has mounted to the august eminence of the Chair of Peter.

As to his personal character, there seems to

be, as far as we can gather from both the home and continental press, a wonderful consensus and ready witness as to the estimable qualities of which he has given proof in the various places in which he has lived and labored. He seems to have been as dearly loved by the citizens of the "Queen of the Adriatic" as by his poor *contadini* at Tombolo. To make a small *cento* of these published testimonies, he is described as "a man of personal fascination and splendid presence"—"a man of fine physique, a handsome open face, with clear cut, powerful features, softened by eyes in which is the light of perpetual youth, reminding the observer of Pius IX. whom he also resembles in his candid, unassuming expression, brightened by a twinkling humor about the lips"—"an early riser and a hard worker"—"a diligent student"—"a zealous but tactful disciplinarian"—"an excellent administrator and organizer"—"one who has high ideals of priestly life and clerical decorum"—"remarkable for great goodness of heart, charity, sympathy, blameless life, and profound piety"—"distinguished by charming frankness and simplicity, remarkable modesty, winning affability combined with wonderful firmness, which makes him absolutely uncompromising in all that concerns the faith or the rights of the Church"—"one who has great kindliness of heart with quite a passionate interest in the social question and the betterment of the life

Personal characteristics.

of the laboring poor"—"a good preacher, and one whose sermons are eloquent by their unction and solidity of matter, rather than by any devices of rhetoric or oratory"—"one possessed of much suavity and charm of manner, with a dislike of pomp or show, but uniting a certain stateliness and dignity with graceful ease of address and a delightful sense of humor"—"one who preaches the gospel of personal culture, and puts cleanliness next to godliness, and good manners next to good morals, setting an example in these things by his own refinement and old-fashioned courtesy of manner." These are indeed but snapshots of character taken by journalists who regard the new Pope from very varied points of view, but they are the echoes of deep impressions which have been left upon the hearts of a people who have known and loved him for more than half a century. If one trait of his disposition may be singled out as predominantly characteristic, we note that all seem to agree that he brings to the Papacy a heart full of Christ-like sympathy for the laboring and suffering masses. "He has compassion on the multitude." More than once he has thrown himself as an apostle of conciliation into the disputes between capital and labor. In the great strike of the cigar-makers in Venice, which threatened such injury to the trade of the city, and such stress of suffering and destitution to multitudes of the people, it was

Kindness and generosity of Pius X.

mainly by his tact and zeal that a settlement was happily arrived at, and a restoration of peace and goodwill established between employers and workmen. His charity in Venice is proverbial. It is said that his alms-giving is so unmeasured that his steward or *Economo* has had to put him on an allowance. The allowance, which ought to last for the month, is generally like a schoolboy's pocket-money, gone in three days. It is well in keeping with the character of one who was called to the Chair of his great fellow-countryman, St. Laurence Justinian, that more than once the episcopal ring of the chief pastor of Venice was in pawn, in order that the cry of indigent poor should not be left unheeded.

[Accident on the underground railway, Paris (84 lives lost). Balkan revolutionary war begun. Gen. Nelson A. Miles retires from army service. House of Lords passes Irish land bill. Dr. Jean Charcot's French Antarctic Expedition sails from Havre. Edison perfects a new style phonograph. Russian fleet ordered to maneuver in Turkish waters. Death of Marquis of Salisbury at Hatfield. Humbert trial concluded, M. and Mme. Humbert found guilty of swindling and imprisoned for 5 years. Report of Royal Commission on the South African War published, revealing a dreadful complication of mismanagement, muddle, and incompetence. In-

Balkan Revolutionary War begun.

ternational yacht races between Sir Thomas Lipton's *Shamrock III.* and the American defender *Reliance,* the American leading. King Edward visited the Emperor Francis Joseph. Third race between *Shamrock III.* and the successful *Reliance.* The *Deutschland* breaks westward record across the Atlantic (5 days 11 hours 54 minutes). Annual meeting of British Association; Mr. Balfour elected President for 1904. Stanley Spencer tried to sail his balloon from the Crystal Palace to St. Paul's and back. Mr. Chamberlain opens his campaign of fiscal reform in Glasgow. S. F. Cody, inventor of the war-kite, crossed the Channel from Calais to Dover in his collapsible kite-boat. The Seychelles proclaimed a separate colony. President Roosevelt received Señor Varilla as Minister of the Republic of Panama. Battleship *Maryland* launched. Count de la Vaulx and Count d'Outremont travel in an airship from Paris to Hull. Chinese-American commercial treaty signed. Fire in Vatican. Visit of the King and Queen of Italy to King Edward. New Panama Canal treaty signed in Washington.]

New Panama Canal treaty.

THE SECESSION OF PANAMA AND THE PANAMA CANAL

(A.D. 1903)

BENJAMIN TAYLOR

ALTHOUGH it is extremely doubtful if "Stout Cortez," with or without all his men, ever did stand "silent upon a peak in Darien," one can be tolerably certain that Simon Bolivar would not have been "silent" had he been there on Nov. 3, 1903. For on that day a limb was torn from the constitutional tree which the great Liberator planted on the soil of the old Spanish kingdom of New Granada. That kingdom had lasted for over a hundred years, under Spanish rule, before Bolivar emancipated the country and founded the Republic of Colombia, which was a confederation of the States of New Granada and of the Provinces of Venezuela. This confederation was in 1819, and Simon Bolivar, as President, established himself at Bogotá, a city which has the disadvantage of being hundreds of miles from all the ports and commercial centres of the country whose capital it is. Between Bogotá and Panama there is no method of communication by land, but from Bogotá to the coast by land and

Bolivar founds Republic of Colombia.

thence to Panama by sea, the journey may now be made in about a fortnight. In Bolivar's time the communication must have been much slower, but Bolivar regarded Panama as the jewel of the new organization, and in 1828 he issued a commission for the formation of a roadway across the Isthmus between the two oceans. He believed that in that narrow strip of land, Colombia held that which would make her a great and wealthy nation. And on November 3, 1903, she lost it, not by conquest, but by secession, and by a secession approved and confirmed, if not aided and abetted, by the greatest Republic in the world, which waged one of the greatest and bloodiest wars on record in order to disprove the right of confederated States to separate from the majority.

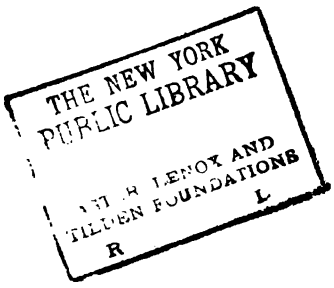
War of Independence.

There is an enduring historical interest in Colombia because of its association with the struggle of Latin-America to free itself from the domination of Spain. The revolt began before the end of the Eighteenth Century, although the great War of Independence did not break out until 1810. Previous to that war, Colombia was the Spanish vice-royalty of Nuevo Reina de Granada. After that war it formed the Republic of Colombia along with Ecuador and Venezuela. These latter States separated in 1828 and formed distinct republics. Colombia then became the United States of Colombia, with nine confederated

TWO VIEWS OF THE PANAMA CANAL

SHOWING THE CULEBRA CUT, AND THE THREE LOCKS AT GATUN

—Vol. VIII, page 2515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States. In 1886 these States were made Departments in a reconstructed Republic of Colombia. One of these States, or Departments, was Panama, with an area of only 30,000 of the 500,000 square miles comprised in the area formerly known as New Granada. In the days of the Conquistadores, the city of Panama was the centre of Spanish influence in the South Pacific, and the Isthmus itself has always been regarded by Colombians as "the navel of the world."

"The navel of the world."

The history of the Panama Canal project may be briefly noted. In 1879 M. de Lesseps began to organize the Panama Canal Company, which was floated in December, 1880. Some 600,000 shares of £20 each were sold, yielding £12,000,000, but the actual cost of the enterprise was estimated by its originator at £26,320,000, and the time required at eight years. The original intention was to build the Canal at sea-level, without locks, like the Suez Canal. The depth was to be 29½ feet, and the width at bottom 72 feet. On the Atlantic side Colon was fixed as the terminal port, and Panama was selected on the Pacific side, the total length of the route between the two points to be followed by the Canal being 47 miles. To carry out the sea-level plan it was necessary to make a cutting 328 feet deep at Culebra. The original scheme was adhered to until 1887, when it was abandoned, and one with a system of locks was adopted. But two

Beginning of the Panama Canal.

years later followed the collapse of the company, and all work on the Canal was stopped. A Commission of Inquiry, in May, 1890, reported that the Canal could be completed in eight years at a cost of £23,200,000, which should be increased to £36,000,000 for the purposes of administration and financing. Eventually the concern was revived in 1894 under the title of the New Panama Canal Company.

For half a century, as Mr. Frederick Penfield (formerly U. S. Consul-General in Egypt) has observed, the Nicaraguan was the only Isthmian Canal believed to be available to the United States. As Frenchmen controlled the Panama route, generations of Americans were reared under the influence of the Nicaragua preference, prior to General Grant and onward. It is scarcely necessary to recall that the Walker Commission reported in favor of this route to Congress, and only sent a supplementary report recommending Panama, when the French company climbed down in its terms. Soon after that supplementary report was presented Consul Penfield publicly advocated the acquisition of the Panama Isthmus by the United States. His argument was that the State of Panama was of comparatively little value to the Republic of Colombia, though of inestimable value to a powerful nation constructing the Canal; that the people of Panama have no affection for Colombia, and have even shunned the name

Report of the Walker Commission.

of Colombians; that it is at least twelve days' journey from Panama to Bogotá, the seat of Colombian government; that three-fourths of the capital invested in the State of Panama for mining and other purposes is American; and that the United States is pledged by treaty to preserve order on the Isthmus, and has repeatedly had to send armed forces there. What Mr. Penfield advocated was an out-and-out purchase on equitable terms of the State of Panama from the Republic of Colombia, so that the Stars and Stripes may float over the Isthmus, as he predicts it is destined to do over half the West Indian islands. But Panama prefers to be an independent State.

Penfield's arguments.

President McKinley, in 1899, was authorized by Congress to appoint a commission of engineers and eminent persons to investigate the question of canal possibilities on the Isthmus of Panama, or in Nicaragua. The commission reported in favor of the canal on one or the other routes. Discussion in Congress over the respective advantages of the proposed routes finally ended in June, 1902, by the enactment of a law authorizing the President of the United States to purchase the properties and franchises of the French Panama Canal Company for $40,000,000, provided a satisfactory title could be secured. At the same time the Secretary of War was authorized, in the event of purchase, to con-

struct the canal at a cost not to exceed $145,000,000.

Negotiations were entered into with the Republic of Colombia to secure the necessary concessions, and to ascertain the character of the legal title of the Panama Canal Company. It was found that the company had a valid title, and on February 16, 1903, the United States formally closed the offer, subject to the ratification of the treaty with Colombia, then pending, which provided that the United States should pay Colombia $10,000,000 in cash for the concessions, to be paid on the exchange of the ratification, and an annuity of $250,000, beginning nine years after the date of ratification, and in return should obtain a lease of the canal for 100 years, with the privilege of continued renewals. The treaty further provided that the territory forming the Canal Zone should be neutral and under the guarantee of both Governments. Colombia, however, failed to ratify the treaty and proposed a new one providing for greater compensation and the explicit recognition of the sovereignty of Colombia in the canal territory. The failure of the treaty created great dissatisfaction in Panama, and on November 4, 1903, the latter country set up an independent republic, which was formally recognized by the United States. A treaty with the new republic was ratified February 23, 1904, by which the United States guaranteed the in-

Acquisition by the United States.

dependence of the Republic of Panama, and allowed it the original compensation offered to Colombia. On its part, the Republic of Panama granted to the United States in perpetuity the use, occupation, and control of a strip of land ten miles in width, extending five miles on either side from the center of the canal, with the proviso that the cities of Panama and Colon should be exempted from this territorial grant.

The Canal.

The Panama Canal is to be a lock canal about fifty miles long from the Atlantic terminus in Limon Bay, near Colon, to the Pacific terminus in Panama Bay. The highest point of the divide, Mt. Culebra, originally about 300 feet above the sea, has been cut to about 160. Beginning at the Atlantic shore line, the canal has a width of 500 feet for three miles to Gatun. At Gatun a duplicate flight of three locks, having a lift of 28 1-3 feet each, will raise vessels up to a lake formed by a dam at that point. This lake is 30 miles long, and at places nearly 8 miles wide. From the Gatun locks the steamer channel will be through this lake for about 23 miles, and for 16 miles it will have a width of 1,000 feet. From San Pablo to Juan Grande it will be narrowed to 800 feet; then to 500 feet to Bas Obispo; then to 300 feet, the width maintained through the Culebra cut and on to San Miguel. Here a lock with a lift and descent of 30 feet forms the con-

nection with Sosa Lake, 55 feet above the sea, where vessels will again have lake navigation for five miles to Sosa Hill, in which are two locks of 27½ feet each to carry vessels down to the sea level of the Panama Bay section of the canal.

The canal will have a minimum depth of 41 feet. It will be formally opened to the commerce of the world January 1, 1915.

Iroquois Theatre burned.

[Dec. 30: Iroquois Theatre, Chicago, burned (700 lives lost). Jan. 5, 1904: Sir Oliver Lodge lectures at Birmingham on Radium and its meaning.]

RADIUM AND ITS LESSONS

(A.D. 1904)

SIR OLIVER LODGE

THE recent visit to London of Monsieur and Madame Curie, who in the intervals of teaching physics at Paris have made brilliant chemical discoveries, has revived the interest felt through the scientific world in radium and its properties since its discovery by the Curies in 1898.

Briefly these properties, as investigated by several physicists, are that radium, like the other far less active substances previously discovered, is constantly emitting, without apparent diminution, three kinds of rays: rays called γ, which appear to be chiefly of the same nature as the X rays of Röntgen; rays called β, or cathodic, which are similar to the cathode rays in a Crookes tube and to the Lenard rays outside such a tube, and are found to consist of extremely minute flying corpuscles or electrons negatively charged; and rays called α, which appear to be composed of projected and positively charged atoms of matter flying away at an immense speed measured by Professor Rutherford of Montreal. The whole power of emission is designated radio-

Three kinds of rays.

activity, or spontaneous radio-activity to distinguish it from the variety which can be artificially excited in several ways, and was discovered in the first instance as a bare experimental fact by M. Becquerel. The most prominent, the most usually and easily demonstrated kind, are the β rays; for these possess remarkable penetrating power and can excite phosphorescent substances or affect photographic plates and electroscopes after passing through a great length of air or even through an inch of solid iron. But although these are the most conspicuous, they are not the most important. The most important by far are the α rays, the flinging off of atoms of matter. It is probable that everything else is subordinate to this effect and can be regarded as a secondary and natural consequence of it.

Heat-generating power of radium.

For instance, undoubtedly radium has the power of constantly generating heat: M. Curie has now satisfactorily demonstrated this important fact. Not that it is to be supposed that a piece of radium is perceptibly warm, if exposed so that the heat can escape as fast as generation—it can then only be a trifle warmer than its surroundings; but when properly packed in a heat-insulating enclosure it can keep itself five degrees Fahrenheit above the temperature of any other substance enclosed in a similar manner; or when submerged in liquid air it can boil away that liquid faster than can a similar weight of any-

thing else. Everything else, indeed, would rapidly get cooled down to the liquid-air temperature, and then cease to have any further effect; but radium, by reason of its heat generating power, will go on evaporating the liquid continually, in spite of its surface having been reduced to the liquid-air temperature. But it is clear that this emission of heat is a necessary consequence of the vigorous atomic bombardment—at least if it can be shown that the emission is due to some process occurring inside the atom itself, and not to any subsidiary or surrounding influences. Now that is just one of the features which is most conspicuous. Tested by any of the methods known, the radio-activity of radium appears to be constant and inalienable. Its power never deserts it. Whichever of its known chemical compounds be employed, the element itself in each is equally effective. At a red heat, or at the fearfully low temperature of liquid hydrogen, its activity continues; nothing that can be done to it destroys its radio-activity, nor even appears to diminish or increase it. It is a property of the atoms themselves, without regard, or without much regard, to their physical surroundings or to their chemical combination with the atoms of other substances. And this is one of the facts which elevate the whole phenomenon into a position of first-class importance.

Nothing can destroy its power.

The most striking test for radio-activity is

the power of exciting phosphorescence in suitable substances; as, for instance, in diamonds. Sir William Crookes has shown that by bringing a scrap of radium, wrapped in any convenient opaque envelope, near a diamond in the dark, it glows brilliantly; whereas the "paste" variety remains dull. A number of other substances emit light also when submitted to the emission (in this case usually the β emission) from radium; and Crookes has also shown that the substance known as zinc-blende if submitted to the α rays of radium, which can be done by bringing a scrap of it sufficiently near a zinc-blende screen with no interposed obstacle or impediment, the bombardment, when looked at in the dark, becomes visible not as a mere generally diffused glow as in ordinary cases of phosphorescence, but as a multitude of luminous specks, darting or flashing hither and thither to all appearance, but really occurring first in one place and then in another, each flash or light-speck representing the impact of the atomic projectile upon a target. To see them individually some moderate magnifying power must be employed and it then constitutes a simple and beautiful experiment, for which the merest trace of radium is sufficient.

Tests for radio-activity.

But although the excitation of phosphorescence is the most striking test and proof of the power of radio-activity, because it appeals so directly to the eye, it is by no means the

most delicate test; and if that had been our only means of observation, the property would be still a long way from being discovered. It was the far weaker power of a few substances —substances found in Nature and not requiring special extraction and concentration, such as Madame Curie applied to tons of the oxide-of-uranium mineral called "pitch-blende" in order to extract a minute amount of its concentrated active element—it was the far weaker power of naturally existing substances such as that of pitch-blende itself, of thorium, and originally of uranium, which led to the discovery of radio-activity. And none of these substances is strong enough to excite visible phosphorescence. Their influence can be accumulated on a photographic plate for minutes, or hours, or days together, and then on developing the plate their radio-active record can be seen; but it is insufficient to appeal direct to the eye. In this photographic way the power of a number of minerals has been tested; but even this is far from being the most sensitive test. The most sensitive test that can be applied is the power which any radio-active substance possesses of rendering atmospheric air conductive, and so discharging any electrified body in its neighborhood. The most minute trace of radio-activity can be detected in this way; and by this means R. Strutt has found that the property is widely diffused—that most metals and many other substances

The most sensitive test.

possess it to some small degree; and Professor J. J. Thomson has detected traces of the power in common water from deep wells.

The emission of atoms

The emission of atoms does not seem, at first hearing, a very singular procedure on the part of matter. Many forms of matter can evaporate, and many others emit scent; wherein, then, lies the peculiarity of radio-active substances, if the power of flinging away of atoms at tremendous speed is their central feature? It all depends on what sort of atoms they are. If they are particles of the substance itself, there is nothing novel in it except the high speed: but if it should turn out that the atoms flung off belong to quite a different substance —if one elementary body can be proved to throw off another elementary body—then clearly there is something worthy of stringent inquiry. Now, Rutherford has measured the atomic weight of the atoms thrown off, and has shown that they constitute less than 1 per cent. of the atoms whence they are projected; though whether the matter flung off corresponds to any known material is at present quite uncertain. It has been suggested that it may be helium, but that is little better than a guess.

But the radio-activity of the substance itself —a substance like radium or thorium—is by no means the whole of what has to be described. When the emission has occurred, when the light atoms have been thrown off,

it is clear that something must be left behind; and the properties of that substance must be examined too. It appears to be a kind of heavy gas, which remains in the pores of the radium salt and slowly diffuses away. It can be drawn off more rapidly by a wind or current of air, and when passed over suitable phosphorescent substances it causes them to glow. It is, in fact, itself radio-active, as the radium was; but its chemical nature is at present quite unknown. Its activity soon ceases, however, gradually fading away, so that in a few days or weeks it is practically gone. It leaves a radio-active deposit on surfaces over which it has passed; a deposit which is a different substance again, and whose chemical nature is likewise different and unknown. The amount of substance in these emanations and deposits is incredibly small, and yet by reason of their radio-activity, and the sensitiveness of our tests for that emission, they can be detected, and their properties to some extent examined. Thus, for instance, the solid deposit left behind by the radium emanation can be dissolved off by suitable reagents, and can then be precipitated or evaporated to dryness and treated in other chemical ways, although nothing is visible or weighable or detectable by any known means except the means of radio-activity. So that directly one of the chain of substances which emanate from a radio-active substance ceases to possess that

Emanations and deposits.

particular kind of activity, it passes out of recognition; and what happens to it after that, or what further changes take place in it, remains at present absolutely unknown. So it is quite possible that these emanations and deposits and other products of spontaneous change may be emitted by many, perhaps all, kinds of matter, without our knowing anything whatever about it.

The emanations from radium and thorium, however, are recognizable enough, by reason of their remarkably active properties; they can be passed along tubes and otherwise dealt with; and not only do they behave as a gas in ordinary ways, but their liquefying-point has likewise been approximately determined and found to be something like 250 degrees below the Fahrenheit zero. At this temperature, at any rate, they condense and decline to pass on; perhaps because they are entangled with the liquefying air or some of its constituents, possibly because they really liquefy themselves; but whether they really condense or not, they by no means lose their radio-active property, but, like every kind of substance which is known to possess this property, they continue it unchanged and undiminished through whatever vicissitudes they pass.

Liquefying-point of emanations.

That being so, what is the meaning of the series of facts which have been here hastily summarized; and how are they to be accounted for? Here we come to the hypothetic

and at present incompletely verified speculations and surmises, the possible truth of which is arousing the keenest interest. There are people who wish to warm their houses and cook their food and drive their engines and make some money by means of radium; it is possible that these are doomed to disappointment, though it is always rash to predict anything whatever in the negative direction, and I would not be understood as making any prediction or indicating any kind of opinion on the subject of practical applications of the substance, except, as we may hope, to medicine. Applications have their place, and in due time may come within the range of practicability, though there is no appearance of them at present. Meanwhile the real points of interest are none of these, but of quite another order. The easiest way to make them plain is to state them as if they were certain, and not confuse the statement by constant reference to hypothesis: guarding myself from the beginning by what I have already said as to the speculative character of some of the assertions now going to be made.

Atoms of matter are not simple, but complex; each is composed of an aggregate of smaller bodies in a state of rapid interlocked motion, restrained and coerced into orbits by electrical forces. An atom so constituted is fairly stable and perennial, but not infinitely stable or eternal. Every now and then one

Atoms of matter.

atom in a million, or rather in a million millions, gets into an unstable state, and is then liable to break up. A very minute fraction of the whole number of the atoms of a substance do thus actually break up, probably by reason of an excessive velocity in some of their moving parts; an approach to the speed of light in some of their internal motions—perhaps the maximum speed which matter can ever attain—being presumably the cause of the instability. When the break-up occurs, the rapidly moving fragment flies away tangentially, with enormous speed—twenty thousand miles a second—and constitutes the α ray, or main emission.

If the flying fragment strikes a phosphorescent obstacle, it makes a flash of light; if it strikes (as many must) other atoms of the substance itself, it gets stopped likewise, and its energy subsides into the familiar molecular motion we call "heat"; so the substance becomes slightly warmed. Energy has been transmuted from the unknown internal atomic kind to the known thermal kind: it has been degraded from regular orbital astronomical motion of parts of an atom into the irregular quivering of molecules; and the form of energy which we call heat has therefore been generated, making its appearance, as usual, by the disappearance of some other form, but, in this particular instance, of a form previously unrecognized.

Transmutation of energy.

Hitherto a classification of the various forms of energy has been complete when we enumerated rotation, translation, vibration, and strain, of matter in the form of planetary masses, ordinary masses, molecules, and atoms, and of the universal omnipresent medium "ether," which is to "matter" as the ocean is to the shells and other conglomerates built out of its dissolved contents. But now we must add another category, and take into consideration the parts or electrons of which the atoms of matter are themselves hypothetically composed.

The emission of the fragment is accompanied by a convulsion of the atom, minuter portions or electrons being pitched off too; and these, being so extraordinarily small, can proceed a long way through the interstices of ordinary obstacles, seeing, as it were, a clear passage every now and then even through an inch of solid lead, and constituting the β rays; while the atoms themselves are easily stopped, even by paper. The electrons.

But the recoil of the main residue is accompanied by a kind of shiver or rearrangement of the particles, with a suddenness which results in an X-ray emission such as always accompanies anything in the nature of a shock or collision among minute charged bodies; and this true ethereal radiation is the third or γ ray of the whole process, and, like the heat-production, is a simple consequence

of the main phenomenon, which is the break-up of the atom.

The residue.

The emission over, and the fragment of the atom gone, the residue is no longer radium, but is something else. What it is we do not yet know; but since it is produced in isolated atoms here and there, with crowds of foreign substance between, there is no cohesion or any continuity between its particles; they are separated like the atoms of the gas, or like the molecules of a salt in a very dilute solution in which there are millions or billions of times as many atoms of the solvent as there are of the dissolved salt. So they are easily carried away by any motion of the medium in which they are mechanically embedded; but they retain their individuality, and their radio-active power persists, because the breaking-up process is by no means finished, stability is far from attained: indeed, the instability is more marked than it was in the original substance; for whereas in the original substance only one single atom here and there out of a million of millions was affected by it, here in the diffusing emanation or first product of incipient atomic dissociation every atom seems unstable, or at least to be in a very critical condition. So that in a time to be reckoned in minutes or days or months (according to the nature of the emanation, whether it be from thorium or radium or uranium) a further breakdown has occurred in every atom; and so its accompani-

ment of radio-activity ceases. The radio-active power has disappeared from the emanation, but it has not wholly ceased: it has been transferred this time to a solid deposit which has been the residual outcome of the second break-up. For the atoms of this deposit also are unstable and break up, in a time which can be reckoned in months, days, or minutes, apparently in roughly inverse order to the duration of the parent emanation. Another and another substance has also been suspected by Rutherford and Soddy, as the outcome of this third break-up; while gradually the radio-active power of the resulting emanations becomes imperceptible, and further investigation by present methods becomes impossible for lack of means of detection of sufficient delicacy.

The emanation's radio-active power disappears.

Here then, we appear to have, in embryo, a transmutation of the elements, the possibility of which has for so long been the guess and the desire of alchemists. Whether the progress of research will confirm this hypothesis, and whether any of the series of substances so produced are already familiarly known to us in ordinary chemistry remains to be seen. It is not in the least likely that any one radio-active substance can furnish in its stages of collapse the whole series of elements; most likely one substance will give one series, and another substance will give another; and it may be that these emanations are new and un-

stable elements or compounds such as are not already known, or it may be that they approximate in properties to some of the known elements without any exact coincidence. The recognized elements which we know so well must clearly be comparatively stable and persistent forms, but it does not follow that they are infinitely stable and perpetual; the probability is that every now and then, whether by the shock of collision or otherwise, the rapidity of motion necessary for instability will be attained by some one atom, and then that particular atom will fling off the fragment and emit the rays of which we have spoken, and begin a series of evolutionary changes of which the details may have to be worked out separately for each chemical element.

Probable evanescence of matter.

If there be any truth in this speculation, matter is an evanescent and transient phenomenon, subject to gradual decay and decomposition by the action of its own internal forces and motions, somewhat as has been suspected and to some extent ascertained to be the case for energy. If it be asked, "How comes it, then, that matter is still in existence? Why has it not already all broken down, especially in these very radio-active and therefore presumably rapidly decadent forms of radium and the like?" the question naturally directs us to seek some mode of origin for atoms, to conjecture some falling together of their pristine material, some agglomeration of the sep-

arate electrons of which they are hypothetically composed, such as is a familiar idea when applied to the gravitational aggregates of astronomy which we call nebulæ and suns and planets.

We may also ask whether many other phenomena, known but not understood, are not now going to receive their explanation. The light of the glowworm and firefly and other forms of life is one thing which deserves study; the Brownian movements of microscopic particles is another. Are we witnessing in the Brownian movements any external evidence, exhibited by a small aggregate of an immense number of atoms, of the effects of internal rearrangement and emission of the parts of the atoms, going on from the free surface of the particle? And can it be that the light emitted by the glowworm—which is true light and not technical radio-activity, and yet which is accompanied by a trace of something which can penetrate black paper and affect a light-screened photographic plate—is emitted because the insect has learnt how to control the breaking-down of atoms, so as to enable their internal energy in the act of transmutation to take the form of useful light instead of the useless form of an insignificant amount of heat or other kind of radiation effect; the faint residual penetrating emission being a secondary but elucidatory and instructive appendage to the main luminosity?

The light of the glowworm.

Many more questions may be asked; and if the conjectures now rife are to any great extent confirmed, it is clear that many important avenues for fruitful experimental inquiry will be opened up. Among them an easy and hopeful line of investigation, lying in the path of persons favorably situated for physically examining the luminous emission of live animals, may perhaps usefully be here suggested.

Avenues for experimental inquiry.

And let me conclude by asking readers to give no ear to the absurd claim of paradoxers and others ignorant of the principles of physics, who, with misplaced ingenuity, will be sure to urge that the foundations of science are being uprooted and long-cherished laws shaken. Nothing of the kind is happening. The new information now being gained in so many laboratories is supplementary and stimulating, not really revolutionary, nor in the least perturbing to mathematical physicists, whatever it may be to chemists; for on the electric theory of matter it is the kind of thing that ought to occur. And one outstanding difficulty about this theory, often previously felt and expressed by Professor Larmor—that matter *ought* to be radio-active and unstable if the electric theory of its constitution were true—is being removed in the most brilliant possible way.

[In 1904: British army battles with 5,000 Dervishes (1,000 killed). Arbitration con-

ference assembles in Washington. House of Representatives passes Pure Food bill. Lord Northcote, the new Governor-General of Australian Commonwealth, arrives in Melbourne. Mrs. Florence Maybrick released from London prison. Firedamp explosion kills 184 men in mine near Cheswick, Penn. Famous library of Turin destroyed by fire. Taft becomes Secretary of War. Gunpowder explosion of Fort Bhatinda, India, kills 40 persons. United States troops evacuate Cuba. Diplomatic relations between Japan and Russia severed. Conflagration in Baltimore, Md., destroys 2,500 buildings ($125,000,000 loss). War breaks out between Japan and Russia. Admiral Togo attacks Port Arthur at midnight. Major Scott's command almost annihilates Moro rebels. Dr. Manuel Amador elected first President of Panama. Earl Roberts retires. Panama Canal Treaty signed by President Roosevelt. Conflagration in Rochester, N. Y. ($3,000,000 loss). State Capitol at Madison, Wis., burns. Prairie fires in Oklahoma (1,000 families homeless). Japanese bombard Vladivostok. French ship *Camboge* wrecked off coast of Cochin China (50 persons drown). Port Arthur attacked. Japanese attempt to block Port Arthur with steamers. Tibetan mission encamped at height of 15,500 feet. Two thousand Tibetans attack British (300 killed). British *Discovery* Antarctic expedition returns to New Zea-

Port Arthur attacked.

Attempt to assassinate King Alfonso.

land. Attempt to assassinate King Alfonso at Barcelona. Premier Maura of Spain stabbed. Powder explosion on battleship *Missouri*, near Pensacola, Fla. Russian army retreated across the Ya-lu River. Tibetans surrender to British.]

INTO TIBET

(A.D. 1904)

COLONEL H. C. WYLLY

DAYBREAK on the frontier; but a few moments ago it was still quite dark, and then a grayness came stealing down the pass; the snow-capped hills around us take on a pearl-colored and then a soft pink hue, rocks with the snow lying in their fissures are drawn against the sky—and that old campaigner, the Punjaubee mule-driver, is as usual heralding the morn by coughing his very soul out by the embers of last night's fire. The men—British and native—bivouacked within the high walls of the pass, are beginning to rise from the nooks and corners wherein at an elevation of 14,000 feet above sea-level they have dozed through the September night; half an hour ago it was impossible to distinguish objects more than a very few yards away from the radius of the dying camp fires round which the men were lying, but the darkness and the dank mist it brought with it are rapidly giving place to daylight, and already one can see the sentry from the picket at the head of the pass stamping up and down on his post, thinking more of get-

Dawn in the Himalayas.

ting the numb feeling out of his toes than the giant peaks encircling him, the deep valley below, and the silence by which he is encompassed. A little stream tinkles down the pass, up which winds the trade-route from the plains of India to the highlands of Tibet; climb upward, and you stand upon what seems like "the world's white roof-tree," on the northeast frontier of India—downward, and you come upon the scene of last evening's fight, where huddled heaps in frowsy rags keep a silent vigil.

"The world's white roof-tree."

Yesterday morning—can it be only twenty-four hours?—we awoke at Gnatong, and found that, in the language of the camp, the Tibetans had "given themselves away"; during the dark hours they had come down from behind their walls on the southern slopes of the Jalep and Pemberingo passes, and had erected hangars nearly three miles in length along the hills at the head of the Gnatong Valley, whence they had shrilled defiance to us in the camp below.

We had never hoped for such good luck, and felt that the Lord had delivered them into our hands. The whole summer through we had possessed our souls in patience within our stockade at an elevation of 12,000 feet, where every night the snow had snapped our ridge-poles, and every day the sun had melted the snow into a morass about our feet; living in a region where in six months the rainfall

averages a hundred and sixty inches, waiting on and ever waiting for that "break" in the monsoon when our transport should find its legs and we might go out against the enemy and attack him in the passes; and here at last was our chance. The Tibetans had themselves come down to meet us, abandoning their triple line of loopholed walls, at which they had labored throughout the summer, for a narrow distant ridge roughly fortified in the dark hours of an autumn night. The preparations, which had already been made in anticipation of an advance, were hurried on; the British force moved out, and by the evening the Tibetans had been driven from the ridge and followed to the slopes of the Jalep La. We were too close upon their heels for them to make any stand among their defenses, and as the sun went down the enemy were in full retreat over the mountains while the main body of the British force was filing up the narrow rocky pass. Heavy clouds were rolling down from the peaks and mingling with the mists rising from the valleys, and at the coming of the dusk a fine penetrating rain commenced to fall, threatening a comfortless bivouac.

The Tibetans deliver themselves into the hands of the enemy.

We had long since emptied our haversacks of the food we had hastily thrust into them on leaving camp in the morning, and the mules, carrying stores and blankets, were stumbling among the rocks at the mouth of

How the night was spent.

the pass until long after midnight; some of us had crept into the forsaken tents of the Tibetans; others had—unwisely—put on the skin coats thrown away by the enemy in their flight, only to find that these were thickly populated by what the explorer, Chandra Dass, called "demons"; and the rest of us had alternately roasted and shivered through the night as we rolled from side to side in front of the camp fires.

The morning's advance.

But now the camp is well astir, and the company of British infantry which has been promised the lead into Tibet is already moving up to the summit of the pass a few hundred feet above the bivouac. It was one of those perfect mornings which in India the close of the rainy season so often brings with it. We had now left the gloomy pass behind us, at our backs was the loose stone wall where the Gnabu Depen had intended to make a final stand, and before us bathed in radiant sunlight lay the road to Lhassa. To right, left, and immediately below us are the rocks—amongst which the pathway winds and falls, but lower down appear wintry shrubs and dwarf rhododendrons, which again give place to primeval forest, in which the rough road is presently lost to view. Nowhere very broad, the valley narrows further on to a gorge of scarcely sufficient width to contain the torrent fed from the snows of the frontier; at the narrowest point of the valley a green spur

runs down from the wall of a rock on the left, and while it effectually shuts out any view of the village which we know lies beyond, it discloses a trace of habitation in the Tajwi Monastery, perched upon a bluff overhanging and dominating the route. Beyond again rise hills at right angles to our course, and these must, we know, be on the further side of the Chumbi Valley, few dilapidated huts, which our guide tells us are the villages of Langrang and Behuetang. We again descend to the stream, which now runs past with tremendous velocity, and which has swollen almost to a river; the valley has narrowed until the path has to find its way as best it can, now on one bank and now on the other, with a bridge thrown across whose timbers are lying broken in the eddies. Our leading files cross hastily over—half wading, half clambering along the broken piers—and are fired on from the jungle fringing the other side; but the enemy is clearly not in any strength, and we push on to the secure passage of the defile. Within the next mile we meet with six or eight more broken bridges, which all need repair before the mules can cross; but the afternoon sun is getting low, and the General sends on two companies of British infantry to seize the village of Rinchagong, where we are to pass the night, and pushing on, we emerge from the defile into a smiling valley, wherein lies our destination. Above us on the left stands the

Beautiful scenery.

Tajwi Monastery among fields and pastures, and on the right, on high pine-clad hills, can be seen small parties of armed Tibetans watching our advance. These are the men who—commanded by Serkham-se, the Tibetan father of the Rani of Sikkim—have been holding another pass, the Donglam La, and who are now falling back to prevent us from cutting off their retreat, and by pushing on we can at least bar their entrance into Tibet and drive them into Bhutan.

We fix bayonets and press on, the enemy racing along the hills parallel to us; there is a shot from the front, answered by another from the left, but at the turn of the road we can see the white houses of the village below us. The men double eagerly down the steep path, part swing round to the left in order to take the woods in reverse, a half company rushes down to the end of the village, and the remainder, joining hands, wade waist-deep through the torrent and sweep unopposed through the courtyards and alleys of Rinchagong.

There was a rain during the night, but the morning broke fair and sunny, and the charming valley into which we had descended was at its best. We were now at a level of something under nine thousand feet above sea-level, and in an ideal climate. The Himalayas appear to act as a reef, against which the rain-clouds of the monsoon expend them-

A lovely valley.

selves, leaving fine weather and clear blue skies on the northern side. There was health and freshness in the pure air circulating among the low pine-clad hills of this elevated valley; the sky was cloudless, the turf beneath our feet was green and springy. Beside us—between broad and level banks—ran the Mochu River down the centre of the Chumbi Valley, its snowy waters hurrying from their source, below the glaciers of Chumulhari to mingle under the shadow of the Garo hills with the great stream of the Brahmaputra. Our start is not made very early, for we are going no further than Chumbi, where stands the summer palace whither we are bound: above and beyond these hills rise range upon range of mountains, while towering over all and girt about with fleecy clouds stands the white cone of Chumulhari. At the elevation at which we stand Nature seems still and lifeless; only last night and the rocks were echoing "the tumult and the shouting" while belated fugitives were hurrying across the Tibetan frontier, but here in the roof of the world is now no sound of strife, no hum of insect, no sight of living thing, and all that comes faintly to our ears is the muffled roar of the torrent rushing to join the Mochu River.

The advance.

But the advance guard is now "stringing out" down the hill, and already we have invaded Tibet; the road lies clear before us, and we are piloted by Ugyen Gyatshu, who

knows the way as far as Lhassa, if need be, as well as any man. Immediately below the summit of the pass we come upon a gloomy mountain tarn, whose dark waters flowing over a lip of rock swell the stream which springs from Jalep La. The men are all eager for the advance into the new country of which they have heard so much, and which has been so long denied them, and the first mile or two of the descent is soon passed over, and it is not until we reach the edge of the forest that a halt is called to enable the transport and the rear-guard to close up, when the advance is resumed with equal expedition and increased caution. The road now winds among huge boulders and scattered forest trees—descending abruptly to the edge of the stream or climbing precipitously above. With every step the trees grow closer together and the undergrowth becomes denser, while now and again we meet with traces of the enemy in the still smoking embers of wayside fires and broken potsherds, where a lagging fugitive was brewing himself a brick of tea, and halts are called in two small clearings.

Nearing the frontier.

Our force is first divided; the transport under a strong Gurkha escort turns back in the Jalep road to a camping ground at Nyatoong, where we are to bivouac this night on our return to India or rather Independent Sikkim, while the larger portion of the invading force takes the road

up the valley toward Chumbi. With every turn of the road the scenery grows prettier; where the road bends to the left is a small cluster of forsaken farm buildings, having the look of comfort and prosperity—almost of home. A little further on we cross by stepping stones a shallow brook bustling to the Mochu past a picturesque but deserted village. Across the river stands the comfortable two-storied house of the Chinese frontier-resident, an official who has been greatly disturbed by recent events, and who has spent every moment of the hours since our arrival beneath the shadow of his country's flag, which he has wagged ceaselessly before our eyes. The countryside is so quiet, and looks so peaceful, that it is difficult to believe that the fugitives of a semi-barbarian army, 11,000 strong, have fled but yesterday along this valley. A short distance outside Chumbi we were met by a small deputation, headed by the Poorboo Dewan, a gentlemanly person occupying a high official position under the Sikkim Government. He had long been on our side and had done his best, according to his lights, to counteract the overpowering Tibetan influence at the Court of the Sikkim Raja, and he had now arrived to welcome us to Chumbi, which was soon in sight. We found the palace to be little more than a well-built house, surrounded on three sides by a number of barn-like structures, occupied by the usual

The Chinese frontier.

The palace.

army of dilapidated dependents who attach themselves to an Eastern Court. The palace itself stood close to the river, immediately facing a bridge, over which the road here passed. The valley beyond opened out, and the hills which enclosed it appeared higher and more imposing; we could see for perhaps another mile down the valley, but then the road seemed to turn sharp to the right to Phari Jong, whither this time we may not follow. Our troops filed across the bridge and piled arms in the meadow by the water's edge, while a company of British infantry quietly formed a cordon round the palace, so as to prevent anybody from entering in or going forth.

Where is the Sikkim Raja?

The political officer at once instituted inquiries regarding the Sikkim Raja, who was believed to be hiding somewhere in the vicinity, and an armed party entered the palace to search for him and for incriminating papers. We gained admission through a hall, freely but rather crudely frescoed with sporting scenes of tiger hunting in the jungle.

The ground floor was taken up principally with store-rooms containing rubbish and ancient weapons, so we mounted by a broad ladder—like a ship's companion—to the first story, and found ourselves at once in something like an old English country house. The windows were small, the doors of the different rooms opening from the landing were of a black wood resembling old oak, while the

rooms were up and down two or three steps or round a corner, as one often finds them in old houses in England. But on entering the rooms we were at once in a strange world—half monastery, half court, and wholly Eastern. At the back of the house was a large room running the full length, and filled with the idols, masks, trumpets, prayer-wheels, and bells which appear inseparable from Buddhist worship. A strange world.

We were received here by the mother of the Sikkim Raja, and she handed round small cups containing a straw-colored rather fiery liquor, tasting something like spirits of wine. She was a pleasant-featured, well-preserved old lady, dressed with considerable taste, and wearing upon her head a horseshoe-shaped structure, about twelve inches high, studded with precious stones, and hung with seed pearls. She conducted some of us to her own particul r sanctum—a cheerful room with a pretty window looking out upon the river, the walls hung with draperies of Chinese dragon-silks, while a half-open door gave us a glimpse of inner rooms decorated with curious carvings, painted wall-screens, and tall China vases. On the floor above the rooms were plainer, but the palace altogether presented an appearance of comfort and even luxury, although outside and within a few yards of the threshold dirt and old and horrible dust heaps were everywhere visible. The Raja was

not to be found, and we had no orders further to explore the Chumbi Valley; so the force retraced its steps to Rinchagong, where a company was left to destroy the enemy's stores and to empty the gunpowder into the river. That night we bivouacked some two miles up the road, on open ground below Tajwi Monastery. Next morning we set our faces toward India, and with our departure from the sunny valley the heavy clouds settled once more over us. It was a wet and toilsome march up the steep and broken path toward Jalep, and as we neared the summit of the pass the rain was falling heavily, and men and mules slipped and fell as they struggled on. The dusk was deepening and the mists were gathering thicker as we gained the wall which crowned
Jalep La. the Jalep La; but there were yet five miles of a mountain track between us and our camp. The scattered tents of the Tibetan army were still standing, white and ghost-like, as the soldiers swung past in the half-light; but of the men who had occupied them some lay among the bushes and boulders on the slope above Gnatong while even the living were carrying the tale of their rout to Lhassa, "the Land of God."

[Admiral Makaroff drowned in blowing up of Russian battleship, Port Arthur. King and Queen of England visit Ireland. Battle of Ya-lu River, retirement of Russians to Liao

Yang with isolation of Port Arthur. First stone of the new Campanile, Venice, laid. Visit of King Edward to Rome. Palace at Seoul burns. Conflagration in Toronto ($13,000,000 loss). Avalanche near Pragelato, Italy, buries 100 miners. Russia demands cession of Manchuria from China. British kill 2,000 Somalis in battle. Earthquake in Asiatic Turkey (2,000 lives lost). Louisiana Purchase Exposition, St. Louis, opened. Panama Canal and Zone formally transferred to the United States. Texas tornadoes destroy many lives. Automobile race from Paris to Madrid stopped by fatal accidents. Conflagration of Jersey City piers ($5,000,000 loss). Japanese battleship *Hatsuse* sunk off Port Arthur. Funeral of H. M. Stanley, the African explorer. Inaugural celebration of Empire Day, a permanent memorial to Queen Victoria and sign of Imperial cohesion. Victory by Japanese at Kin-chau. International Congress of the Salvation Army in London. Theodore Roosevelt and Charles E. Fairbanks nominated for President and Vice-President. Popocatapetl volcano bought by American syndicate. Alton B. Parker and Henry G. Davis nominated for Democratic President and Vice-President. Erie train collision at Midvale, N. J. (17 killed). Diaz reelected President of Mexico. Death of Johannes Paul Kruger, President of the Transvaal Republic. White Star liner *Baltic* (largest ves-

Diaz reelected President of Mexico.

sel in the world) starts on her first eastward voyage. Freedom of London given to Lord Curzon of Kedleston at the Guildhall. Yale and Harvard athletes defeated Oxford and Cambridge by 6 events to 3. Russian Minister of Interior von Plehve assassinated. International motor boat race at Ryde won by English. British Tibetan expedition enters Lhassa. Defeat of Russian fleet by Japanese at Port Arthur. Tornadoes in St. Paul and Minneapolis kill 19 persons ($3,000,000 loss). Korea surrenders control of her finances and foreign affairs to Japan. Battleship *Louisiana* launched. Orenburg-Tashkent Railway opened.]

Battleship *Louisiana* launched.

THE ORENBURG-TASHKENT RAILWAY

(A.D. 1904)

ANGUS HAMILTON

THE railway journey between Petersburg and Orenburg covers 1,230 miles; and between Orenburg and Tashkent the distance is 1,200 miles, the latter line having taken almost exactly four years to lay. Work began on the northern section in the autumn of 1900, and many miles of permanent way had been constructed before, in the autumn of 1901, a start was made from the south. Although the system was not opened to general traffic before the midsummer of 1905, the two sections were united in September of 1904. Originally communications between Orenburg and Tashkent were maintained by means of tarantass along the post-road, led from Aktiubinsk across the Kirghiz steppes *viâ* Orsk to Irghiz, and thence through Kazalinsk to Perovsk, where the road passed through Turkestan to run *viâ* Chimkent to Tashkent, a journey of nineteen days. In addition to the galloping *patyorka* and *troika*—teams of five and three horses respectively—which were wont to draw vehicles on the post-road, and the more lumbering Bactrian camels, har-

Railroad completed in 1905.

nessed three abreast and used in the stages across the Kara Kum Desert, long and picturesque teams of camels bound for Orenburg and carrying cotton and wool from Osh and Andijan, silks from Samarkand and Khiva, tapestries from Khokand, lambs' wool, skins, and carpets from Bokhara, and dried fruits from Tashkent, annually passed in almost endless procession between Tashkent and Orenburg from June to November. Of late years, however, the Trans-Caspian Railway, commenced by Skobeleff in 1880, and gradually carried forward by Annenkoff to Samarkand, has supplanted the once flourishing traffic of this post-road, along which the local post has been for some time the sole movement. This new line does not exactly follow the old post route, but from Orenburg, which is the terminus of the railway from Samara on the Trans-Siberian system, it crosses the Ural River to Ilensk on the Ilek, a tributary of the Ural. From Ilensk the metals run *viâ* Aktinbinsk and Kazalinsk along the Syr Daria Valley *viâ* Perovski to Turkestan, and thence to its terminus at Tashkent.

Picturesque caravans.

From Orenburg the line, four versts from the station, crosses the Ural River by an iron bridge 160 sagenes (1 sagene=7 feet) in length, running from there southward to Iletsk, a sub-district town of the Orenburg Government and 72 versts from Orenburg itself.

Direction of the road.

Here the line turns eastward, continuing for 213 versts along the right bank of the river Ilek, and crosses the river by an iron bridge 105 sagenes in length. From Iletsk station a short branch line three versts in length, proceeds to the Iletsk salt-mines. Following now the left bank of the Ilek River, the line approaches, 255 versts from Orenburg, the town of Aktinbinsk, a district town in the Turhai Province. At this stage the railway crosses the watershed of the Ural, Temir, Kubele, and Embi rivers, and the line comes to the Kum Asu Pass across the Ungodjarski range 486 versts from Orenburg. The passage of the line through the mountains, extending about 26 versts, imposed a severe test upon the constructive ability of the railway pioneers. Beyond the range the line turns southward, and follows the valleys of the Bolshoi, Mali Karagandi, and the Kuldjur rivers until, 600 versts from Orenburg, the line arrives on Lake Tchelker. The line now runs across the Bolshiye and Maliye Barsuki sands, where there is abundance of underground fresh water, to the northern extremity of the Sari Chegonak inlet on the Aral Sea, where it descends at 790 versts to sea-level to move along the north-eastern shore between the lakes. At 942 versts it approaches the military depot at Kazalinsk about 36 sagenes above sea-level, sometimes called Fort No. 1, which has gradually lost its exclusive military character and become a

Difficulties met with in construction.

leading district centre in the Syr Daria Province.

The main line keeps to the river Syr Daria, running through the steppe along the coast road to Karmakchi, or Fort No. 2, 1,108 versts from Orenburg and 53 sagenes above sea-level. On leaving Karmakchi the line diverges from the post-road which, winding round a succession of lakes and marshes, runs at a distance of 50 versts from the river. The railway, however, continues its original direction, and goes straight along the watershed of the river Syr Daria and the Karauzyak, a tributary which it crosses twice by two small bridges, each constructed with two spans 60 sagenes in length. The character of the whole tract of country from Karmakchi to Perovski, 138 versts, differs considerably from the region preceding it in consequence of the quantity of lakes, *ariks,* and small tributaries which afford an abundant supply of water. The low-lying ground is everywhere covered with a thick growth of reeds, while the more elevated parts, watered by the *ariks,* are well covered by crops of various kinds. The station of Perovski, 1,246 versts from Orenburg, and at an altitude of 65 sagenes, is situated in flat country, one and a half versts from the settlement of Perovski, more readily recalled to students of the Russian development of this region by the name of Ak-Mechet. From here to Djulek the line returns once more to

The scenery changes.

the post-road, and runs at some distance from the Syr Daria, passing between the river and the Ber-Kazan lakes at the station Ber-Kazan. At Djulek, 1,343 versts and 74 sagenes above sea-level—the name being adopted from a small adjacent village—the line diverges from the post-road and runs direct to the village of Skobeleff, 1,367 versts to Orenburg. Skobeleff is one of those curious peasant settlements which, located in the uttermost parts of the Russian Empire, preserve in their smallest detail every characteristic of remote Russia. At such a place life savors so strongly of the Middle Ages that one scarcely heeds the purely modern significance which attaches to the Iron Horse. Barely 30 versts from Skobeleff, and situated close to the Syr Daria, there is the station of Tumen-Arik, 1,394 versts from Orenburg and 80 sagenes high. For 120 versts the line now runs parallel with the post-road, and, still clinging to its direction, even where the road separates from the river, reaches Turkestan station, 1,514 versts from Orenburg, at an altitude of 103 sagenes. Two and a half versts to the south lies the town of Turkestan, one of the most important towns in the Syr Daria Province, and 40 versts from the Syr Daria. The next station, Ikan, 1,543 versts, is associated with the history of the conquest of Turkestan, a famous battle having been fought about the scene where the station buildings now stand. Twenty versts

Quaint Skobeleff.

north of the station, close to the post-road, stands a memorial to the Ural Cossacks, who fell there during the fight. The following station, Otrar, 1,558 versts, is imbued with the tradition derived from the existence of an enormous mound which stands amid the ruins of the old-time city of Otrar, that Timur, when his army crossed the Syr Daria, ordered his soldiers to throw a handful of earth on the ground, so that a mark to posterity should be established at the point where the river was crossed in safety.

A bountiful oasis.

The country in the neighborhood of Tashkent, as seen from the railway, presents the picture of a bountiful oasis. For 20 versts there is no interruption to a scene of wonderful fertility. Market gardens, smiling vineyards, and fruitful orchards, not to mention cotton-fields and corn-lands, cover the landscape. This abundance is in a measure due to careful irrigation and to the excellent system for conserving water which has been introduced. In support of it 113 specific works were completed, each of which—and the giant total includes water-pipes by the mile and innumerable aqueducts—was a component part of that scheme of irrigation by which life in Central Asia alone is made possible. Apart from the requirements of the countryside and the interests of the town and district of Tashkent, the needs of the line have been carefully studied with a view to political developments.

In defining the local significance of the Orenburg-Tashkent Railway, the system should be divided into four sections: No. 1, from Orenburg to the Ungodjarski Mountains, about 400 versts; No. 2, from the Ungodjarski Mountains to the sands of Bolshiye-Barsuki, 400 to 560 versts; No. 3, from the sands of Bolshiye-Barsuki to Kazalinsk, 560 to 845 versts; No. 4, from Kazalinsk to Tashkent, 845 to 1,762 versts. The four sections.

[Great missionary meeting Boston, Archbishop of Canterbury present. Battle of Shaho (11 days); Japanese, 16,000 killed and wounded; Russians, 13,000 killed, 45,000 wounded. King Edward entertained Admiral Jewell and other officers of the U. S. warship *Olympia* at Buckingham Palace. Russian Baltic Squadron, under Admiral Rojestvensky, attacks the North Sea trawlers, mistaking them for Japanese torpedo boats.]

THE DOGGER BANK AND AFTER

(A.D. 1904)

L. C. CARR LAUGHTON

OCTOBER 22.—Shortly after midnight the Russian Baltic Fleet, outward bound to the Far East, fired, for a period of about twenty minutes, on a fleet of English steam trawlers fishing near the Dogger Bank. The Russian Fleet steamed on without acknowledging its error or helping its victims in any way.

The Russian Fleet fires on trawlers.

October 24.—The news was published in the morning papers, and a violent anti-Russian outbreak began. The Continental press was inclined to lay the whole blame on Russia. At this time the British Home Fleet was at Cromarty, the Channel Fleet was at Gibraltar, the Mediterranean Fleet was in the Adriatic, and the six armored cruisers of the Cruiser Squadron were undergoing repairs in the home ports.

October 27.—Publication in England of Admiral Rojestvensky's explanation of the occurrence. News received that the four new battleships had put into Vigo.

October 28.—Refusal of the Continental press to accept Admiral Rojestvensky's explanation.

The Prime Minister at Southampton, said: "In the story of our fishermen there is much tragedy; there is no romance. In the story of the Russian admiral I don't know that there was any tragedy, but I am driven to believe that there was much romance." He also announced that there would be a Board of Trade inquiry, and an inquiry by an International Tribunal, which, however, would have nothing to do with arbitration, but would seek to fix the responsibility. Pending inquiry, Russia promised to detain part of the Baltic Fleet at Vigo, also that any person in her service found guilty should be punished. A complete apology and a promise of compensation were tendered, together with an undertaking to guard against the recurrence of such incidents.

Tragedy but no romance.

By this time it was pretty generally stated that the crisis was at an end.

October 30.—Russian naval inquiry into the incident opened at Vigo.

The inquiry.

November 1.—The Russian ships left Vigo. Alarm in England owing to a popular belief that this constituted a breach of agreement.

The Russians left behind one captain and three lieutenants to attend the International inquiry.

November 2.—The coroner's jury at Hull, schooled by the Treasury, found that the fishermen had been "killed by shots fired without warning or provocation from certain Russian war-vessels."

Official announcement that the Russian ships left Vigo with the approval of the British Government. Revulsion of public opinion.

Revulsion of feeling.

November 5.—The Russian Squadron which had gathered at Tangier sailed, the heavy ships going west, the lighter craft going east.

November 7.—A report from St. Petersburg that terms for the constitution of the International Tribunal had been agreed to by England and Russia, and publication of the alleged terms.

This report was false. The alleged convention did not decide as to whether the vote of a majority should be binding on the Tribunal.

November 9.—The Foreign Secretary, speaking at the Guildhall, stated the precise terms of reference to the International Tribunal, and quoted a distinct Russian assurance that the officers left behind by the Baltic Fleet were implicated in the disaster, and that all who were found guilty would be punished.

November 12.—The Russian press repudiated the statement that the officers found guilty would be punished.

November 13.—The Russian Consul at Bremen advertised, offering rewards to witnesses who could give evidence of the presence of suspicious vessels in the North Sea.

The heavy Russian ships reported to be at Dakar.

November 15.—Opening of the Board of Trade inquiry at Hull.

But to turn from the reeking byways of politics and diplomacy to the clean atmosphere of the open sea. If any good is to ensue from the present evil, it will be in virtue of the influence that this episode is bound to exercise on the future of naval warfare. But before the full benefit can be extracted from the catastrophe, there are many and serious difficulties to be faced and overcome.

Influence of this episode on future naval warfare.

In the first place, can it honestly be maintained that the Russians acted criminally in allowing their imaginations to run away with them? The contention is that their action was criminal. If so, the criminality did not lie in the actual firing, for, granting the right of a fleet in such a frame of mind to be at sea, the firing was inevitable. It is a truism of naval warfare that when torpedo attack is expected, torpedo-boats are frequently detected where none are, and imaginary no less than real boats will of necessity be fired on. The commander of the *Ting Yuen,* torpedoed at Wei-Hai-Wei in 1894, summarized the difficulties very well.

Did the Russians act criminally?

"From the beginning of the time when torpedo attacks became likely, and when we became subject to alarms, real and false, the difficulty of controlling the fire became evident —not from any disciplinary fault, but from the point of view of expediency. Who was to control the fire? No one man could, be-

cause he could never be sure of seeing the enemy first. This means that once the alarm signals have been made, and the enemy's boats are in the neighborhood, each man will fire at anything suspicious he sees."

Belligerents and neutrals.

The point raised is really concerned with the duties of belligerents toward neutrals. This is the branch of the law which is most in need of revision, for attention hitherto has been largely concerned with the reverse of the medal—with the duties of neutrals toward belligerents; and with each successive war the duties of neutrals have been more clearly defined and have become more onerous. It is notorious that this latter branch of the subject is still very far from being in a satisfactory state, for the letter of the law and the interpretation thereof varies with the geographical position, though the spirit of it is as constant as the universe. The essence of the duty of a neutral is to do nothing which may act to the advantage of one belligerent and to the prejudice of the other. And the essence of the belligerent's duty in return is that he shall carry on the war with the least possible inconvenience to those Powers that remain neutral.

The case of neutrals.

It must be admitted that in this war, if one neutral has fallen notably short of the ideal of neutrality, one belligerent has missed the ideal of belligerency by at least as much. Questions of the duties of neutrals do not

largely concern the present case, although there are certain of them inextricably involved with it. But it is owing to the incubus of the unrestrained exercise of belligerent rights that we have this disaster, this dishonor to deplore. We have, by our acquiescence, connived at various irregularities on the part of Russia—at unjustifiable extension of the list of contraband and of the right of search. And now we have our reward. We have encouraged Russia in a belief that the rest of the world exists for the convenience of a belligerent. Yet we cry out at the inevitable result! We have sowed the hurricane and are reaping the whirlwind. The Dogger Bank disaster will not have been in vain if it succeeds in drawing such attention to the laws and limitations of warfare that similar incidents are made impossible in future.

International Woman Suffrage League organized.

[International Woman Suffrage League organized in Berlin, Susan B. Anthony president. Colorado mine strike and dynamite plot, Cripple Creek (15 killed). Submarine torpedo boat *Fulton* undergoes 12 hour test. Excursion steamer *General Slocum* (carrying 2,000) burned, New York. Japanese defeat Russians at Telissu (Wa-fang-kan). Assassination of General Bobrikoff, Governor-General of Finland. Wreck of P. and O. liner *Australia,* Melbourne Harbor. Russians leave Liao Yang and retire toward Mukden.

Earl Grey made Governor General of Canada.

Earl Grey made Governor-General of Canada. *Minnesota,* largest steamship ever built in America, launched. Col. Younghusband, head of the British mission, signs treaty with Tibet. *Discovery* arrives at Spithead with Commander Scott and National Antarctic Expedition. Peter of Servia crowned. Disastrous floods in Colorado and New Mexico. Collision on Missouri Pacific Railroad near Warrensburg, Mo. (kills 30 persons). Battleship *Georgia* launched. President Roosevelt invites Powers to a peace conference. New York subway opened. Franco-American arbitration treaty signed in Washington. War College opened in Washington. Roosevelt elected President. Battleship *New Jersey* launched. American-German arbitration treaty signed. Louisiana Purchase Exposition closes. American White Cross First Aid Society organized. Armored cruiser *Tennessee* launched. Revolutionary demonstrations at St. Petersburg. Anglo-American arbitration treaty signed. Italian-American arbitration treaty signed. Return of the *Gjöa* expedition.]

THE CONQUEST OF THE NORTHWEST PASSAGE

(A.D. 1904)

CAPTAIN ROALD AMUNDSEN

THE sloop *Gjöa* registers forty-six tons and measures seventy-three feet. She has a beam of twenty feet, and draws, when laden, ten feet of water. She was not built specially for Arctic traffic, but has been strengthened subsequently with an ice-sheathing of two-inch oak planks, cross beams, knees, and everything else that can help to render resistance to the ice. She is equipped with a petroleum motor of thirteen horse-power, by the help of which she is able to reach a speed of three knots in smooth water. Thus the principal motive power is not derived from the motor, which is meant for use only in calm weather. *Gjöa* relies chiefly on her sails, and, like all vessels of her type, she does splendidly.

The *Gjöa*.

The aim of the expedition was to force its way into the region about the earth's magnetic North Pole, and to make observations at a fixed station during a protracted period of time. For this purpose the expedition was excellently furnished with magnetic instruments. The

The aim of the expedition.

expedition numbers seven members. Second in command is Lieutenant Godfred Hansen of the Danish Navy. All the others are Norwegians.

We sailed from Christiania during the night between June 16 and 17, 1903. It took us a good deal of time to make Godhavn, on Disco Island, because we had a contrary wind all the way. But finally we reached that place in the last days of July. Our purpose in calling there was to establish a magnetic station and to ship more dogs for the sledges. From Christiania we brought with us six dogs—dogs that had taken part in the second *Fram* expedition. At Dalrymple Rock, on the northwestern coast of Greenland, we had to stop to take on board the provisions deposited there for us by two Scottish whaling vessels.

Godhavn reached.

We reached Beechy Island on August 22, and anchored off it to take a series of magnetic observations, which were to be decisive for the remainder of our journey. From this station we were to find the location of the magnetic pole, and thus to ascertain what way we would have to take. Our observations showed the pole to be to the southward, and in that direction we sailed, after having lifted anchor on August 24, our immediate goal being Peel Sound. Off Prescott Island in Peel Sound the compass refused to render further service, and, like our forefathers, we had to be satisfied with the guidance of the heavenly bodies.

Compass refuses to act and stars hide under mist.

But when these, too, refuse their assistance, hiding themselves behind an impenetrable veil of mist, then it is not easy to be a seafaring man.

Without encountering any particularly troublesome opposition by the ice, we wriggled our way southward in the shore water along the west coast of Boothia Felix. On September 9 we hove to in Pettersen Bay, on the southeastern coast of King William Land, and dropped anchor outside a little snug harbor. Gjöa Harbor, which was to be our resting-place for nearly two years, is splendidly protected. The approach to it is very narrow —being only a few yards wider than our boat —and opens toward the south. Thus the inner harbor is completely closed. The magnetic observations we took on the following day proved that we could not have chosen a better spot for our station.

Advantages of Gjöa Harbor.

A laborious period ensued. We had to carry all our provisions on shore to protect them against moisture, and to get more room on board the ship. This work was completed by September 17, and we were confronted with the task of erecting the necessary buildings. The materials for these were obtained from our provision boxes. All the boxes were double, consisting of an inner tin chest surrounded by a wooden box. The boxes were all of the same size and nailed together with copper nails, to prevent them from influencing

the magnetic instruments. The tin chests were stripped of their wooden covering. Then we filled the wooden boxes with sand and used them for walls. Two buildings were erected —one for the instruments used to measure the magnetic variations, and the other as a dwelling for two members of the expedition. Our observations of various kinds were begun on November 2.

Buildings are erected.

First visit of Eskimos.

The first visit of Eskimos occurred on one of the last days of October. They belonged to the Ogluli tribe, which has its hunting grounds along Simpson Strait, on the northern coast of the American continent. This tribe came in contact with the Schwatka expedition in 1880, but had since then had no dealings with white men. We had a good deal to do with the tribe, and became good friends with them all. But we found our best friends among the Netchjilli tribe, which we encountered later on.

There was an abundance of game during the first year. Big herds of reindeer appeared in every direction, and single animals ventured up to the ship. We killed one hundred reindeer in all, to get food for ourselves and our dogs, but we could easily have killed twice as many had we cared to do so. We caught a good deal of grouse also. The harbor froze the first days in October, and the necessary preparations to withstand the winter were made as soon as our other duties permitted it.

Preparations for the winter.

Sails were spread over the ship, and the snow was banked against her sides. Double windows were put in, a system of ventilation was arranged, and many little things were done that helped to make the life on board both comfortable and pleasant. Thus we were able to look forward with equanimity to the famous polar night. We had a good harbor, good houses, a good ship, and an abundance of fresh food. To this must be added that, on account of our location at the low latitude of 68° 37′ N., we did not experience any darkness worth speaking of. We had planned a sledge tour to investigate the magnetic conditions along the west coast of Boothia Felix in the spring. However, seven of our best dogs had died in the course of the winter, thus leaving us very poorly equipped in this line. But we had to do what we could with the surviving ones. Four of us departed on March 1, 1904, to establish a depot for the main expedition, which was to start about the beginning of April. On this trip we recorded the lowest temperature—79° Fahrenheit below zero. But as there was no wind, the cold was not much noticed.

We establish a depot.

While occupied with the task of depositing the provisions we met the Netchjilli Eskimos. One morning, as we were working our way along the east coat of King William Land with sledges and dogs, a human figure became suddenly visible on the pack-ice. It was

joined by several others, and soon some thirty Eskimos, all men, had gathered in a group about 100 steps away from us. It was apparent that they felt uncertain how to regard us. We were the first to make overtures, approaching them with the cry "Manik-tu-mi." It was evident that this had a reassuring effect, and soon they were eagerly replying to our greetings. We had, during the winter, learned a goodly number of words from our friends, the Oglulies, so that on this occasion we were able to make ourselves pretty well understood.

"Manik-tu-mi."

They told us that their snow huts were on the other side of the pack-ice, not far away. I decided to accompany them in order to become acquainted with their tribe, which seemed to be of a very friendly disposition. It was a merry, boisterous procession that made its way across the ice. They thought us very funny, and we repaid their merriment and laughter in the same coin. At the time we met them, they were on their way to their seal grounds. Most of them had dogs. All the dogs were now harnessed to our two sledges—a sign of hospitality—and with each sledge drawn by twenty dogs we made fine time. The dogs did not get along quite as well as their masters, and a thundering battle broke out every now and then. After traveling a couple of hours, we reached their huts. These numbered sixteen and stood far out on the ice. To begin with, the fair sex showed

themselves very timid, but after a while they were led on by an aged belle who headed them in a long line past us. As they passed us, each one uttered a brief grunt which apparently was meant as a welcome. After this parade they disappeared, one and all, into their respective huts to recuperate from the exertions. Only three of the oldest members of the tribe had seen white men—or "Kabluna"—before. This had happened at a place they called Eivili, which, as I learned later, was in the vicinity of Repulse Bay, in the northwestern part of Hudson Bay. This tribe—the Netchjilli Eskimos—became our fast friends and and saw with sorrowful hearts our departure from King William Land. All were very well dressed in fine new clothes made out of reindeer skins. All wore the typical native costume, with long tail-pieces on their coats that bore a good deal of resemblance to full-dress coats. The next day we started out again, and were then accompanied by an Eskimo.

We "astonish the natives."

On our way back we ran across their colony again, and then most of them decided to follow us, that they might examine the wonder which none of them had beheld before—a ship. The home trip proved exhilarating in company with those merry denizens of the Far North. To our comrades on board it was a source of great surprise and much enjoyment to witness the approach of the whole colony. To

The natives see a ship for the first time.

see new faces meant a wonderful variation in their monotonous existence. Soon after their arrival, the Eskimos began to build their snow huts, and in a short time *Gjöa* was surrounded by an Eskimo village. Frequent visits on both sides followed. They wanted to see everything we possessed, and we were much taken with their pretty and comfortable clothes, of which we were anxious to get a stock. This did not prove difficult. In exchange for wood and iron we could have anything they had. Empty tin boxes were wholly worthless to us. But they were keenly desired by our friends. And their value was enhanced considerably if they were polished, and had a handle attached to them. On this occasion I presented a rifle and some ammunition to one of their members who had displayed marked hospitality during our stay with them on the ice. His joy on the receipt of this unexpected gift was indescribable, but the result was that everybody wanted to possess a rifle. As the transition from empty tin boxes to guns and cartridges seemed a little violent to me, I tried to make them understand what the matter meant. But it took me several days to make them grasp the fact that our ship was not laden with rifles.

Presents given to the Eskimos.

Lieutenant Hansen and Helmer Hansen started during August in a boat to examine the conditions in Simpson Strait, and particularly in the region around Eta Island, which spot

marks the narrowest part of the passage to the westward. The plan of the expedition—submitted to the Norwegian Geographical Society at Christiania—provided that, after the conclusion of our magnetic observations, we were to turn westward instead of going back east. The ground for this was that the ice conditions along the west coast of Boothia Felix were regarded as extremely troublesome. My observations since then have caused me to think it impossible to point out any one spot as being more difficult than any other in that region.

A difficult spot.

The summer had been raw and cold, and the fall came early. The reindeer, which the year before had shown themselves in such numbers, seemed this fall to shun the land. We succeeded in killing only thirty animals. The Eskimos had better luck while hunting on the coast of North America, and during the winter they brought us a considerable quantity of meat. And from them we received also large stores of fish. Salmon, trout, codfish, and whitefish were furnished us in quantities. Thus we had plenty of fresh food during the second winter as well.

Provisions for the second winter.

The Eskimos, who had been scattered about their different hunting grounds, began to reappear near the ship in October, and helped to make our existence a little livelier. But this time we were honored with their company much longer than we cared for it. They

showed no signs of breaking up until February, 1905. They had then depleted their stock of provisions so that they had to seek new hunting grounds. Once more a Christmas passed by and a new year arrived. Light days began to prevail, and in their wake followed a lot of work—preparations for an impending sledge expedition. This was started on April 2. It was headed by Lieutenant Hansen, who had with him Peder Ristvedt. The object of the trip was to chart the unknown eastern coast of Victoria Land.

A sledge expedition planned.

We were kept very busy on board during their absence. Everything was to be made ready for our departure, and the vessel had to be overhauled. The houses erected on shore were the first to go. They were pulled down in the latter part of May and the early part of June. The boxes were carried down to the storehouse, and what remained of provisions was repacked in wooden boxes and taken on board. All the instruments had to be taken down, cleaned, and packed away.

Preparations for departure.

In the beginning of June numerous groups of Eskimos returned from their seal hunting and raised their tents in our immediate proximity. They were aware that we would depart in a short time, and that many objects of great value to them would be left behind. Many interesting scenes were enacted in those days. We had collected in one mass fifty empty petroleum barrels, a large number of

wooden boxes, much planking, and quantities of other things. All this material was divided into twelve equal piles, to be divided among those who had done most to earn it. To describe the joy displayed by the twelve lucky individuals would be difficult indeed. They had, all at once, been made rich. I doubt very much that any multi-millionaire ever felt so wealthy as did these men after the distribution of our gifts. But even funnier were the scenes accompanying the handing of our presents to the fair sex. I had in advance gathered all the tin cans, probably numbering several hundred, into a big pile. All the ladies were invited for a certain hour—when the sun stood in the west, which generally marks the ending of the day's toil. At the fixed time they appeared, and I led them to the spot where the great event was to take place. Having arranged them in a ring close about the pile of cans, I told them that, when I gave the sign, they might carry off as many cans as they could lay hold of. No sooner was the sign given than all of them—old and young alike—hurled themselves headlong into the pile. All one could see after that was a tangle of arms and legs in the midst of a rain of tin cans, out of which rose wild yells and screams. When the worst part of the tussle was over, each one of the participants arranged her booty and tugged it over to her tent amid much laughter and rejoicing.

Tin cans for the fair sex.

Lieutenant Hansen and Sergeant Ristvedt returned with the sledges on June 24. The lieutenant had succeeded in charting the east coast of Victoria Land as far north as latitude 72° 10′. He had found many unknown islands in the sea between King William Land, Victoria Land, and the American coast. All these had been entered on the map. The depot at Cape Crozier had been destroyed by bears, but the travelers were fortunate enough to run across game along their entire route—reindeer, bears, seals, and hares. At Lind Island, off the southeastern point of Victoria Land, they fell in with a lot of Kiilnermiun Eskimos from the Coppermine River. These showed themselves as friendly as the other tribes.

Discoveries of Hansen and Ristvedt.

The ice left Gjöa Harbor as early as July, but in Simpson Strait it lay unbroken long afterward. It was especially rough between Todd Island and Point Richardson on the American coast. On August 12 it seemed at last as if it would begin to move. We made our final preparations, and that night everything was ready for the start. *Gjöa* lifted anchor at three o'clock on the morning of August 13, and made her way out of Gjöa Harbor. Our dear Eskimo friends stood on the shore for a long time and waved their last farewells to us.

Farewell to Gjöa Harbor.

Through fog and sleet we sounded our way to Booth Strait along King William Land,

where we had to anchor under cover of a small rock. It cleared in the afternoon, and we were able to get under way once more. The open channel between the Todd Islands and the ice-pack was not very wide—just so wide, in fact, that we were able to slip through. Beyond this narrow channel we found a large sheet of open water. At five o'clock on the afternoon of August 14 we dropped anchor off Kamiglu, a few miles to the east of Eta Island. A number of our Eskimo friends had settled there for their summer hunt. After we had obtained fresh meat from them and taken aboard a young Eskimo boy who wanted to go with us, we left the spot at 10 A. M. As the northern Eta Sound had proved itself impassable, it remained only to try the southern passage. This is three-quarters of a mile wide and studded with reefs. We managed to slip through and get out on the other side. The next doubtful stretch was between the islands discovered by Lieutenant Hansen in the spring. We were forced to seek a way right through the group because the ice lay solid between them and the American coast. The passage was full of rocks and shoals, and anything but agreeable. We found the Victoria Channel full of ice, but with just enough room left for us to squeeze through. Further to the west we found the sea almost free from ice.

A difficult journey.

The entrance to Dolphin and Union Straits was not easy to find, because dangerous reefs

were scattered between Lambert Island, Douglas Island, and the American continent. But we struck a clear road after some search. It looked favorable to the west. On August 25 we caught sight of the first sail we had met on that side. It was the whaling schooner *Charles Hansson,* of San Francisco, Captain McKenna. From him we obtained our first news of the civilized world. What interested us in particular was the difference between Norway and Sweden. It caused me to fix my mind on a trip to the nearest telegraph station for the purpose of learning just how matters stood. We did not tarry long on board the *Charles Hansson.* Having dined with the charming captain and received a welcome present of onions and fresh potatoes, we returned to the ship and resumed our course.

News from the great world.

The first difficulties with the ice were met at Cape Bathurst. The ice was packed against the land and shut off all progress. We were detained two days at that spot. A southeastern wind pushed the ice away from the shore and opened a passage for us. On our way westward we noticed several whalers. We were hailed by the *Alexander* and the *Bowhead,* Captains Tilton and Cook, who offered us assistance if we should need it. This happened a little to the west of Hooper Island. On September 2 we tied up along the ground ice off Cape Sabine. The wind was against us and the lane along the shore was very narrow, so

that we could make no headway. We started anew next day, but were stopped again by dense ice at King Strait. Once more we tied up to the ground ice. We were no longer quite so lonesome as we had been. On the shore of King Strait we found the stranded whaling schooner *Bonanza* of San Francisco. Two of its crew and some Eskimos lived near it to guard the provisions left behind. Only a few days passed before we were compelled to admit that we were shut in for a third winter. The preparations for this, the last, winter, were begun.

Preparations for the third winter.

Wood, which we were wholly lacking before, was now found in great quantities on shore. Masses of driftwood are carried down the Mackenzie River yearly, and are then forced ashore by sea and ice. With logs thus found we erected a fine cabin, in which five of our members are now living. It holds kitchen and dining-room for all the members of the expedition besides. Two men remain on board to look after and guard the ship. The instruments of observation were set up again without delay, and soon everything was moving in the old ruts. During the last part of September I went to Herschel Island and visited the whalers stuck fast in the ice there. I was cordially received and spent several pleasant days with them.

The expedition which was to carry mail for the imprisoned vessels started on October 24.

The mail service.

By the obligingness of the masters, I was enabled to accompany this expedition and to carry forward the mail of the *Gjöa*. We chose the shortest road across the mountains and reached Fort Yukon on November 20. I had hoped to find a telegraph station there, but no—I had to wander two hundred and fifty miles further to the south, to Eagle City, to find the first telegraph key. I reached here on December 5, after having traversed in all a distance of about seven hundred miles.

A long journey.

[Capitulation of Port Arthur agreed upon. Gen. Nogi and Gen. Stössel meet outside Port Arthur after capitulation. Russian garrison leaves Port Arthur. Fall of a quarter of a million tons of cliff near Dover. Triumphal entry of Japanese into Port Arthur.]

THE SIEGE OF PORT ARTHUR

(A.D. 1905)

E. ST. G. HOLBROOK

BY THE first of November the Japanese had captured the whole of the advanced works on the north and northeast fronts, and though they failed to capture any of the permanent works, they had brought up their infantry almost to the main line of the Russian defences. Advance of the Japanese.

The line of investment now extended from Yankiatun on Pigeon Bay on the west, through Panlungshan to Yeanchang on Takhe Bay on the east, *i. e.*, it had been drawn to within five miles of the harbor. Fock still held Liautieshan on the west, and the northern forts had yet to be won.

Nogi now decided that it was necessary, before proceeding further, to possess the Namaokayama ridge and 203 Metre Hill to get a complete command of the restricted anchorage of the harbor, so that the long-range fire, which had hitherto been more or less random, might be more accurately directed.

Five heroic attempts were made to capture the East Kikwan Fort, the whole of the northern ditch of which had been filled with flam-

ing pits. Attack and counter-attack succeeded one another in quick succession, and the crest was repeatedly taken and retaken; finally, however, the Japanese effected a lodgment which they managed to retain. The fighting had been carried on with the greatest fury, and the ramparts were covered with corpses, which were burned and charred past recognition.

The attack on Shungshushan had met with some measure of success; the Japanese had captured the places of the adjoining works to the east.

Success of the Japanese.

The struggle for 203 Metre Hill had been most desperate and had lasted for five days. Two regiments attacked Namaokayama in close column, armed with hand-grenades, and successfully stormed the ridge. The following day 203 Metre Hill was attacked, and a lodgment successfully effected on the southwestern face. On the 29th the Russians made a fierce counter-attack, which was to a great extent successful, but on the 30th the Japanese renewed the attack from the southwest, and, after continuous fighting from daybreak, the opportune arrival of reinforcements at 16 o'clock enabled them to make one final effort, a simultaneous attack being delivered on the southeastern angle; a hand-to-hand combat ensued, with bayonet, clubbed rifle, and hand-grenade, and by 20 o'clock the whole fortress had been carried.

The great fort, the capture of which had for months been the object of Nogi's main efforts, had at last fallen; the Japanese had penetrated the Russian main line of defences; there was no permanent second line which could be obstinately held after the first had been taken, and the fate of the fortress was practically sealed. Fall of the great fort.

"The breach once made, the equilibrium is disturbed, all the rest becomes useless, and the fortress is taken" (Napoleon).

General Kondratenko, the famous engineer and skillful leader, whose noble self-denial and single-minded devotion to country had endeared him to all ranks, had perished, killed by a bursting shell. His loss was undoubtedly deeply deplored, but there is no authentic evidence to confirm the statements of the press that his death had any appreciable effect on the conduct of the defence.

But the Japanese shells were searching every part of the city and harbor; the garrison was daily becoming weaker in numbers and health; 17,000 were in hospital, and many who could manage to hold a rifle were crippled from scurvy and rheumatism; in short the men were dead beat, they could not move, they slept standing; the commanders could give orders, but the troops were totally incapable of execution; and there is no doubt that ammunition for the guns remaining fit for service had run very short; the besieged

were at their last gasp, and surrender was now only a question of hours.

On the 31st of December a mine was exploded under Shungshushan, the parapet was blown up, and, after a fierce assault of one hour, the Japanese captured the entire fort at 10 o'clock. They gallantly rescued a number of the defenders who had been buried under the *débris* of the rampart. The same evening they destroyed the old Chinese *enceinte* in front of East Panlungshan; they occupied the fort the following morning.

New Year's Day saw the Japanese in possession of Fort "H," and the heights south of Husanyangtan, west of Wangtai.

The rapid fall of one work after another proved to the gallant garrison that their heroic resistance had reached its limits and the end had come. Stössel, agreeably to the Russian regulations for a commander in straits, summoned a Council of War, and it was decided to capitulate.

Stössel summons a Council of War.

Nogi received the Russian proposals at 21 o'clock on the 1st of January, and on the following morning cabled to Tokio that he had accepted the terms.

The negotiations between the respective delegates were signed at 12 o'clock on the 20th; they provided that the whole fortress, ships, arms, ammunition, military buildings, material, and other property of the Russian Government should be surrendered, and that

should it be found that any of these had been destroyed subsequent to the signing of the capitulation, it should be considered annulled, and full liberty of action in such case reserved to Japan. All plans of forts, mines, etc., were to be given up. Soldiers, sailors, volunteers, and other officials were to be constituted prisoners of war; but in consideration of their brave defence, naval and military officers and civilians attached to the services were to be allowed to retain their arms, and given the option of returning to Russia on parole, or being sent to Japan as prisoners of war.

Negotiations for peace.

At the beginning of the siege the total number of soldiers, sailors, and civilians at Port Arthur exceeded 55,000 souls. Ten thousand died of wounds or sickness during the investment; 875 officers (including 5 admirals and 8 generals) and 23,500 rank and file, etc., surrendered, and 17,000 sick and wounded remained in hospital on the capitulation of the fortress.

Population of Port Arthur.

Generals Stössel, Barmelemm, Ries, Nadien, Kostchenko, Admirals Grigorovitch, and Prince Ukhtomsku, and 434 other officers and 1,100 dockyard officials, gave their parole; the remainder of the prisoners were sent to Japan and Chifu. The prizes of war included the impregnable forts of Antzushan and Itzushan, and 57 other defensive works, 546 guns (54 large, 149 medium, and 343 small calibre), 80,000 rounds of ammunition,

quantities of powder, cartridges, etc., 35,000 rifles, 4 battleships, 2 cruisers, 14 gunboats, and 50 smaller vessels.

Agreeably to the terms of capitulation, the garrison marched out with the honors of war on the 5th and the victors marched into Port Arthur on the 8th of January, 1905.

Thus concluded a military drama, which, for the valor of the achievements of the victors and the heroism and devotion of the vanquished, stands unparalleled in the annals of war. The only instance in military history, the conditions of which may be considered to bear any resemblance to those of Port Arthur, is the siege of Dantzig in 1813, when General Rapp, with 14,000 men, held out against a Russo-Prussian army of 35,000 investing the town by land and an English fleet blockading it from the sea. In point of duration only does the investment of the Russian fortress compare unfavorably with other sieges on record. In the American Civil War, Richmond held out for 1,485 days, or over four years; Sebastopol was besieged from the 9th of October, 1854, to the 8th of September, 1855; and in the Turko-Russian War in 1854, 15,000 Turks, under the English General Williams, held Kars against 50,000 Russians for 163 days, when starvation stared them in the face and forced them to surrender. The siege of Port Arthur lasted only 130 days in all, although on the date of surrender 232 days

Compared to siege of Dantzig.

Other famous sieges.

had elapsed since the fortress was isolated by the Japanese on the 13th of May, 1904.

[Attempted assassination of the Czar during the blessing of the Neva. General engagement of the Japanese and Russian armies on the Sha-Ho. Balloon trip accomplished from London to Paris in six hours. Grand Duke Sergius of Russia blown to pieces by a bomb in Moscow. Stormy meeting of students in St. Petersburg. Piercing of Simplon Tunnel completed.]

Grand Duke Sergius assassinated.

THE SIMPLON TUNNEL

(A.D. 1905)

H. G. ARCHER

Length of the Simplon tunnel.

THE extraordinary length of the Simplon tunnel is accounted for by the fact that it pursues its subterraneous course at a much lower altitude above the sea-level than any of its rivals. For example, the Arlberg tunnel attains an altitude of 4,300 feet, the Mont Cenis has its summit only two feet lower than the Arlberg, and the St. Gothard climbs up to 3,788 feet. On the other hand, the Simplon, at its highest point, is only 2,310 feet above sea-level. Consequently, the Arlberg, Mont Cenis and St. Gothard tunnels all possess bad gradients; those of the Mont Cenis being the severest, where the approaches are as stiff as one in 33, but the severest gradient on the Simplon Railway, which is the name given to the tunnel, and its approaches connecting with existing lines on each side, does not exceed one in 40, and that on the Italian frontier only.

Cost of the tunnel.

The convention between Switzerland and Italy for the construction of the Simplon Railway, at an estimated cost of £2,800,000, was signed at Berne, on November 25, 1895, when

the necessary subventions were guaranteed on both sides. This sum was increased by £340,000. It was early determined to construct the tunnel on a novel principle, namely instead of having one tunnel to accommodate an "up" and a "down" track, to have two separate tunnels, one for each track, running parallel to one another, and placed 58 feet apart, axis from axis, the two tunnels to be interconnected at stated intervals by means of transverse passages.

The contract for the construction of the colossal undertaking was taken up by a single firm, Brandt, Brandau and Company, of Hamburg, who bound themselves to complete the first single track tunnel, the parallel heading, and the approaches on either side, within five and one-half years' time from the date of commencement. However, the date for completing the construction of the works was extended to April 30, 1905. Work was begun on August 15, 1898, when the guide headings on both Swiss and Italian sides of the Alps were struck.

The lie of the tunnel.

Now to explain the lie of the tunnel. The route selected keeps to the northeast of the celebrated road over the Simplon Pass, 41¼ miles in length, which was constructed by order of Napoleon in 1800-1806, and when completed was the wonder of the times, while it still deserves to rank as one of the great engineering achievements of the world. The Swiss portal

is in the Rhone Valley, and is situated nearly two miles due east from the old-world town of Brigue, which is the present terminus of the Jura-Simplon Railway from Lausanne, 90¾ miles distant. The Italian portal is at a village named Iselle, 11½ miles north from the town of Domo d'Ossola, which is the present terminus of the Mediterranean Railway, connecting with Milan. As might be expected, the great undertaking has caused what are practically new manufacturing towns to spring up in the neighborhood of both portals.

With the exception of two short curves, one at either entrance, the long perforation runs as straight as a die, viz., for a distance of 11.9 miles. Commencing from the Swiss portal, the tunnel ascends for a distance of 10,004 yds. (at the grade of one in 500) to the summit of 2,310 feet above sea-level. The track is then level for 546 yards, after which it descends for 11,030 yards (at the grade of one in 141) to the Italian portal.

It is no exaggeration to state that never has a great engineering undertaking had all its plans so carefully thought out beforehand as the Simplon Railway. One of the principal subjects that engaged the attention of the projectors was the welfare of their *employés*. It was resolved that no such happy-go-lucky state of affairs as was permitted to prevail during the construction of the St. Gothard which resulted in the loss of 600 lives from

Welfare of the employés considered.

"tunnel worm," pneumonia, explosion, and railway accident should be allowed.

The objective is Piacenza, forty-three miles southeast of Milan; for Piacenza, where two great lines of Italian railways meet, is the key of Northern Italy as far as railway communication is concerned. The distance from Calais to Piaçenza should be then 743 miles, instead of 790 miles by the Mont Cenis and 730 miles by the St. Gothard. The last-named route, therefore, will still be a few miles shorter than the Simplon, but this advantage will be discounted by the superior conditions of level of the Simplon Railway. However, the Simplon route is to be shortened by the construction of new approaches on the French side, for Frenchmen are looking to the tunnel to win back for them much of the international through traffic to Switzerland and Italy which they have lost since the opening of the St. Gothard tunnel in 1883.

Simplon route to be shortened.

[Czar issued an Imperial Manifesto of a reactionary character and afterwards a rescript promising a Legislative Assembly for Russia. General strike proclaimed in St. Petersburg. Inauguration of President Roosevelt. Russians forced to evacuate Machun Tan and abandon Kan-tu-ling passes. North Sea incident indemnity of £65,000 paid by Russia. Capture of Mukden announced officially in Tokio.]

BATTLE OF MUKDEN

(A.D. 1905)

E. ST. G. HOLBROOK

THE devoted heroism of the Japanese could make no headway against the dogged, obstinate resistance of the Russians, and in the evening the Kaotuling and Wanyuputzu were still in the latters' hands. Nodzu was still pressing Bilderling north of the Shaho, and on the east and west of the railway the Russians had been driven on to their main defences. Meanwhile Kuropatkin had started off his impedimenta for the north, and transport-trains and carts were leaving Mukden in a long continuous procession. Oku was pressing determinedly forward from the low-lying fields of the Sinkaiho, the affluent of the Hunho, against the defences covering the railway. Nogi, on the left, had occupied Tashihchiao on the road from Hsinmintun, ten miles northwest of Mukden. Finding, however, he could make no further headway, he dispatched his right column north to outflank the Russian second line. This turning column marched from right to left in rear of the other two columns of the army and within eight hundred yards of the enemy.

The dogged resistance of the Russians.

The Japanese left wing, since the 28th of February, had been pushing home attacks amid heavy snowstorms against the most tremendous odds; with star shells and searchlights illuminating every movement, they carried by night at the point of the bayonet, despite the superb and magnificent resistance of the Russians, redoubts defended by barbed-wire entanglements and bristling with machine-guns and shelter-trenches provided with overhead cover, and cleverly arranged to sweep all approaches with cross and converging fire; the inspiring dash and enthusiasm with which they entered the enemy's works was verily worth one's whole life to see. The Russians began to slowly retreat north. Movements of the Japanese.

Meanwhile, in accordance with the Russian Commander-in-Chief's orders, reinforcements had arrived from Linevitch to support the hardly pressed Kaulbars, but the troops, after some forty miles' march without food and rest, were done up, and were of but very little fighting value. At 18.30 o'clock, Kuropatkin, leading his right wing in person with all the men he could scrape together, delivered a determined counter-attack, covered by a furious artillery bombardment, from the north and northwest of Mukden. His object was to force his way in between the armies of Nogi and Oku, who were continuing their wide turning movement, bearing down hard on the Russian right. But he was doomed to failure. Kuropatkin's plan.

He could make no impression whatsoever on the serried Japanese lines. All he could do was to retire slowly, and obstinately hold his second line of defences to cover the continued retirement of his heavy train. In the evening he wired to St. Petersburg: "The front of Mukden is calm."

On the 6th, in the Hsingchingting district, the Russians were still holding their own behind row after row of almost impregnable fortifications. They made several counter-attacks from Tita, twenty miles southeast of Fushun, but on each occasion were repulsed with heavy loss. In the right centre the Japanese had made a slight advance on Fushun. In the afternoon they seized Paitzukou, six miles south of Machuntan, driving the enemy to Toutaikou (two miles southwest of Machuntan), and succeeded in occupying the latter position at 20 o'clock.

In the left centre fighting had been most sanguinary: Meyendorf's Army Corps at Kaotuling had repulsed thirty-two attacks during the last two nights with frightful carnage, and the Russians were still in possession of that pass and Kantolishan.

Thus, in the eastern zone, Linevitch had only been forced back some eighteen miles in ten days' fighting, and the Russians still held the line Tita-Machuntan-Kaotuling strongly entrenched. But it was not Oyama's plan to roll up the enemy in this direction: all he

The Russians hold Kaotuling.

wanted to do at present was to hold up Kuropatkin's left wing to prevent Linevitch from sending reinforcements to the western field of battle.

In the district east of the railway the Japanese had seized Hanchenpu; they had firmly established themselves at Machiapu on the west of the line, and had thus turned the Mukden Hunho defences and Bilderling's stronghold on Putiloff Hill.

But the principal struggle had been raging on the extreme west, where Kaulbars up to the present had successfully defended the railway.

Oku made constant attacks on the enemy's positions on the line Shatotzu-Yangshihtun-Likuantun, and hand-to-hand fighting with bayonet and hand-grenade had been proceeding at intervals for the last eighteen hours without advantage to either side. But finally Nogi's Corps Artillery advanced to decisive range, and enabled the Japanese to gain the foremost village Zookiatun; by night he had reached the line.

Tashihchiao-Pingloupu.—A division of Russians with sixty-four guns had attacked Nogi's columns at Tashihchiao, but had been driven back to Mukden, with heavy loss.

Mukden shelled.

The Japanese shelled Mukden from the southwest, west, and northwest, but made no determined attempt to take the town.

On the 7th, in the western zone, Nogi,

screened by his and Oku's cavalry, extended his left column still further north from Pingloupu, and by night it had occupied Sanchiatu and Tuchengtzu. The Russians delivered seven fierce and resolute counter-attacks against the Japanese from the line Likuantun-Yangshihtun, but were repulsed with heavy loss. On the Shaho, east of the railway Putiloff Hill had been turned and the Russians showed signs of wavering. Nodzu, concentrating his troops in the evening, delivered a general attack at midnight, and Bilderling was driven back to his second line of defence on the Hunho-Wangtajentun (Wankiatun)-Yangshutientzu (Hunhopu); both inclusive. Kuroki was gradually forcing his way nearer Fushun in the right centre. In the eastern zone, Kawamura's right column occupied Huaijen, forty miles southeast of Hsingchingting.

Movements of the Japanese.

Early on the morning of the 8th the Russians, their right wing turned, their centre pierced, and their left flank hard pressed, began to retire north, and the Japanese followed closely in a hard and vigorous pursuit. They heavily shelled the retreating enemy, but a violent dust-storm greatly interfered with the laying of the Japanese gunners. At 8 o'clock Kuroki's right wing, after eleven days' hard fighting had occupied Machuntan, which commands the Fushun Valley, and is the key of the Mukden position. Nodzu had

driven back Bilderling in the most resolute manner, when Kuroki's left wing, by a skillful manœuvre, crossed the Hunho, north of Lunho, and seized the line Chiusan-Fuling, thus driving in a wedge between the Russian centre and left, and cutting off Linevitch and Rennenkampf from the rest of Kuropatkin's forces.

Round Mukden the Russians were still holding out, fighting obstinately.

Nogi had occupied Hsiaochitun. Oyama ordered him to extend further north, and then to wheel east to try and effect a junction with Kuroki, who was pressing forward from the east and driving the Russians against him. Should these operations be successful, the enemy would be surrounded. Position of the Japanese.

The Japanese had already commenced to bridge the Hunho. Kuropatkin reported to St. Petersburg that the Japanese had concentrated a huge force northwest of Mukden and immediate retirement was necessary.

On the 9th, in the western zone, the fighting was most desperate, Kaulbar's army, further reinforced by troops sent by Bilderling, delivering counter-attack after counter-attack led by Kuropatkin in person. Nogi's centre and left could make no further headway. His right column encountered the enemy in strength occupying two fortified villages west of the Northern Tombs, connected by a long trench. The Japanese threw themselves again

and again at the villages and trench, and again and again were thrust back bleeding and decimated. They renewed their attacks during the night, but made no satisfactory progress.

Southwest and south of Mukden the Russians were desperately holding the railway and the line of the Hunho behind strong defences, to cover the retirement of their main forces.

In the Machuntan region the Japanese continued their vigorous pursuit and at 17 o'clock occupied Fushun.

In the eastern zone after many days and nights spent in constant attacks, they had driven the Russians out of Tita at 3 o'clock. At midday Kuropatkin wired to St. Petersburg, "I am surrounded."

The Russians begin to retire.

On the 10th Linevitch's army, cut off from the Russian main forces, continued its retirement northeast over the mountains. It was in a demoralized condition. The rearmost troops occasionally made rough entrenchments to check pursuit, but did not attempt to fight any vigorous rearguard action.

The Japanese advance toward Mukden.

At 10 o'clock Nodzu entered Mukden. The retiring Russians got entangled in the southern environs of the city and many thousands were taken prisoners including most of the foreign *attachés*. Huge quantities of arms, ammunition, provisions, forage, and stores fell into the hands of the Japanese.

Southwest of Mukden, Kaulbars was driven

from his last stronghold at Tsaotatzu and began an orderly retreat north, covered by a skillfully handled rearguard.

At daybreak four battalions of Nogi's right column broke through the trench between the villages and got behind the enemy. But the fire was too hot for them, and they had to seek cover behind the wall of the outer enclosure of the Tombs. They immediately loopholed the wall and prepared it for defence.

A detachment of Kuroki's reached Puho, thirteen miles north of Mukden, and succeeded in capturing some prisoners and carts.

Russians retire from Mukden.

At 15 o'clock the Russians began to retire from all their positions in the vicinity of Mukden. But a gap remained north of the city which neither Nogi and Oku on the west of the road, nor Nodzu and Kuroki on the east could manage to force, though their troops attacked again and again with indescribable fury and unexampled bravery. Dearth of ammunition and lack of numbers due to heavy losses, and the heroic and dogged resistance of Stachelberg's and Zarubaieff's Army Corps, which were covering the Russians' retirement, doomed the Japanese to the mortification of seeing the enemy literally melt away before their very eyes, at the moment when they had got round both his flanks and decisive victory seemed an absolute certainty.

All four armies shelled the retreat to a cer-

tain extent, but a thick dust-storm raged all day and made accurate laying a matter of impossibility.

End of Mukden campaign.

At 20 o'clock Oku and Nodzu joined hands in rear of the enemy and the Mukden campaign had come to an end. At 18 o'clock Kuropatkin had wired to St. Petersburg: "Our retreat has been most dangerous, but, thanks to extraordinary efforts, our armies are now out of danger."

Oyama wired to Tokio: "To respect sanctity of place where Imperial dynasty of China arose, and to preserve peace and tranquillity among Chinese inhabitants of Mukden, in issuing orders for pursuit, I have strictly prohibited troops from taking up quarters within walls of the city."

On the 11th the Russians continued their retreat north, hungry, exhausted, and demoralized, and the Japanese followed closely on their heels, constantly harassing both flanks.

In the eastern zone, the Japanese drove the enemy out of Yingpau, eighteen miles east of Fushun. In the mountainous district east of the Imperial Chinese road, a large number of Russian officers and men surrendered.

In the western zone, the Japanese continued to drive the beaten Russians north. The Russians' retreat was most arduous, the country being intersected by nullahs with steep banks, where wagons could only cross singly. Fif-

teen miles north of Mukden they had to abandon a train of carts twelve miles long.

It was necessary now for Kuropatkin to make a stand to check pursuit to enable him to restore order amongst his retreating troops. He accordingly drew up two divisions and fifty-six guns on the hills south of Tieling, carefully entrenched. The Japanese attacked in centre and both flanks with two brigades on the 12th, but were repulsed with 750 casualties. The following day they pressed forward again, and succeeded in driving back the Russians, who lost 1,000 men before they retired.

On the same day, the 13th, Kawamura's centre column occupied Hsingchingting. At midnight on the 15-16th, the Japanese occupied Tieling, after a hard fight. On the 17th it was officially announced at St. Petersburg that Kuropatkin had been relieved of the Commander-in-Chiefship of the Russian Forces in the Far East and Linevitch appointed in his stead.

Russian losses.

The Russian losses were great. Forty thousand were taken prisoners, including General Nakhimoff, 26,500 killed, and 90,000 wounded, or 156,500 casualties in all; while 2,000 horses, 60 guns, 60,000 rifles, 200,000 rounds gun ammunition, 25,000,000 rounds S. A. A., 150 ammunition wagons, 1,000 transport wagons, 3 Chinese cartloads of maps of the country, 45 miles of material for light rail-

way and 350 wagons for same fell into the victors' hand.

The Japanese casualties were 73,235.

General Linevitch supersedes General Kuropatkin.

[General Kuropatkin superseded by General Linevitch as Commander-in-Chief of the Russian army in Manchuria. Manuel Garcia, the great singing-teacher, celebrated his hundredth birthday. New island appeared in Rui Kui Archipelago. Disastrous earthquake in India. Demonstration of the unemployed in Trafalgar Square, London. Ports of Formosa closed to foreign ships. Czar issued orders granting freedom of worship in Russia. Massacres in Warsaw. Earthquake shocks in Vesuvius. Admiral Togo annihilated the Russian Baltic fleet in the Sea of Japan.]

BATTLE OF THE SEA OF JAPAN

(A.D. 1905)

ARCHIBALD S. HURD

ADMIRAL TOGO handled his ships in the Sea of Japan with such complete success that what the best opinion thought would be a hard-fought battle resolved itself into a battue. In the long story of sea warfare there is no parallel to the series of events which culminated in this fight. With a fleet far inferior in battleships, but with a superiority in armored cruisers and torpedo craft, the Japanese swept practically out of existence, in a period of about forty hours, the forces under the control of the Russian Commander-in-Chief. In thirty-seven minutes, Admiral Togo tells us, the issue was decided, and the remainder of the time was devoted to "rounding off" the victory. If any importance could be attached to those elaborate "paper comparisons" which are used to indicate the standard of strength of the great naval Powers, the result of the action of May 27-28 should have been a draw, with the advantage slightly in favor of Admiral Togo. The history of the naval struggle since the dramatic opening of February 28, 1904, has

A thirty-seven minute victory.

served to completely unmask the virtue of those mechanical comparisons between the strength of rival fleets, which it is so easy to make and which events are so swift to expose. Russia began the war with a fleet thrice as strong as that of Japan, but it was widely distributed, while Japan's forces were concentrated.

Sea power is a delicate combination of forces which cannot be purchased with money alone; it consists in the provision of the best-tried weapons, and the patient training in their efficient use of officers and men who have the three essential characteristics—the fighting edge, an aptitude for technique, and the sea habit.

Japan's small fleet.

Japan entered upon this war with one of the smallest fleets in the world. With six battleships and eight armored cruisers the officers and men of the Japanese Fleet, supported by torpedo craft and scouts, have swept from off the Far Eastern seas every single vessel flying the Russian ensign. It was Nelson's dictum that "numbers only can annihilate." These words were written in the old sailing days, when ships fought side by side, and the crews engaged in hand-to-hand contests; and if there is one moral more than another to be drawn from the great victories won by the Japanese, it is that this saying of the great British sea-captain is no longer applicable to modern conditions. If numbers could have annihilated,

Japan at this moment should be under the heel of the Tsar.

The battle of the Sea of Japan, as Admiral Togo has officially styled it, occurred after a period of many months of anticipation and speculation. From August 14, when Admiral Rojestvensky hoisted his flag on the *Kniaz Suvaroff*, down to the opening of the fight in the Tsushima Straits, the progress of his squadron from the Far West to the Far East fascinated the world. It straggled out in detachments, and when, early in May, the last installment of the out-going fleet, under Admiral Niebogatoff, effected its junction with the main body under Admiral Rojestvensky off the coast of Indo-China, naval opinion, irrespective of its sympathies with the one or the other belligerent, acclaimed in terms of high praise the achievement of the Russian Admiral in taking his great heterogeneous and unruly armada within strategical touch of the Japanese forces. Never had an admiral been entrusted with a task of the kind fraught with so many difficulties, and whatever epitaph history may write on the Russian admiral as a war commander, nothing can rob him of the credit due to his unparalleled success as a leader of men and a resourceful and dogged sailor. Attended by nearly fifty steamships, including an immense number of transports and other auxiliaries, and a curious assortment of obsolescent and obsolete men-of-war, Admiral Ro-

Rojestvensky a great leader and sailor.

jestvensky steamed past Formosa to a point not far distant from Shanghai, where he detached a portion of his auxiliaries, and in high hope of victory because he had the "numbers" with which to "annihilate," turned to make a dash for Vladivostok through the Straits of Tsushima. He may or may not have known that Admiral Togo had lost one of his best battleships a year previously, and that the number of units of this class at his command was only four in addition to eight armored cruisers. It is certain that the Russian admiral over-estimated the fighting value of the *matériel* which constituted his fleet, and failed to understand the subtle combination of the human element and the gun and torpedo which constitutes naval power. There seems no doubt that Admiral Rojestvensky and his officers entered on the final contest with high hopes. He made the fatal mistake of valuing too highly his own strength in ships and under-estimating the strength of his foe, and he appears to have attributed to Admiral Togo the false strategy of dividing his force so as to guard the other straits through the Japanese archipelago leading to Vladivostok. As the Japanese had the interior line, it was unnecessary for Admiral Togo to change the disposition he had already made until by the actual movements of the enemy he was assured that Admiral Rojestvensky had decided not to take the short cut to Vladivostok by way of the Tsushima Straits.

Rojestvensky underestimates his enemy's strength.

Early on the morning of Saturday, May 27, the Russian fleet approached the Straits of Tsushima, lying between Korea and the island of Kiusiu. Admiral Rojestvensky was still under the impression that Admiral Togo had so divided his forces that only a small squadron would be on guard at this point. He seems to have sent out no scouts to "feel" for the enemy, but steamed ahead in two columns, his cruisers on the right and his battleships on the left, with his auxiliaries between and tailing off in the rear. He had got his head well into the danger zone before he realized his mistake. A small force of Japanese cruisers appeared ahead of him, and opened the fight with a desultory fire, and apparently the Russian admiral believed that this small decoy force comprised the only Japanese men-of-war in the vicinity. Undismayed, he pressed forward, the Japanese cruisers flying before him. Meanwhile Admiral Togo, with the main fleets, lay hidden from view among the islands which bestrew the Korean littoral. His whereabouts were not known even to most of the officers in the subsidiary squadrons, much less to the people of Japan. In Japan, at least, it is recognized that a surprise is the essential factor in success, and that, therefore, success depends on secrecy. Admiral Togo had issued his orders to his subordinate admirals, and kept in wireless communication with them, but his exact place of hiding was,

Story of the battle.

Admiral Togo in hiding.

outside the main fleets, known to only a small circle of officers. When the Russians had entered the battle zone, which he had prepared for them with such patience and self-constraint in the weary months of waiting, the scheme was dramatically developed. The whole fleet of Japan, as though by the ringing up of a curtain, revealed itself in fighting trim, and the greatest sea battle ever fought had commenced. When the Russians were well in the Channel between Tsushima Island and Japan, with the "decoy" squadron ahead, Admiral Togo, with four battleships and two armored cruisers, appeared round the northern end of the island, followed by Admiral Kamimura with the other six armored cruisers.

Greatest sea battle ever fought.

After a feint, the whole twelve armored ships steered diagonally across the face of the enemy so as to bring their broadside to bear in a concentrated fire on the leading Russian ships. When by this manœuvre the preliminary demoralization had been produced —the Russian battleship *Oslabia* taking fire —Admiral Kamimura raced to the rear of the enemy, while three light cruiser divisions worried his flanks, and in a special degree attacked the transports. Thus were the Russians hemmed in owing to Admiral Togo's bold tactics—"Demoralization and then destruction," might have been the Japanese motto. They were determined to have a fight to a

Clever strategy.

finish, and they acted on Nelson's dictum "out-manœuvre a Russian."

In this wise did the battle open. Could Admiral Togo win? Those who care to read again the anticipations of qualified writers may see that even to the last it was held that though the odds were in favor of Admiral Togo, the outcome of a set battle was uncertain to this extent, that the fighting might prove so desperate, the losses on both sides be so great, that the victor, to whichever side the laurels fell, would be so shattered and even decimated that he might emerge from the conflict with a fleet only in a complimentary sense ruling the Far Eastern seas. Assessed by every tangible fighting asset, the comparative strength of the two fleets approached something of an equality. In guns and torpedo equipment they contrasted thus: Comparative strength of the two fleets.

Calibre of Guns	Number of Guns: Russian		Japanese	
12 inch	26		23	
10 inch	7	32	3	41
9 inch	12		4	
8 inch	13		34	
6 inch	147		196	
Number of torpedo tubes (about)	124		200	

Judged on this basis, there was no reason why the two fleets should not emerge in something of the condition of the Kilkenny cats after their famous encounter. How com-

pletely were all prognostications falsified in a matter of thirty-seven fateful minutes! While still about eight miles distant, the Russian ships opened a quite ineffective fire. The Japanese waited in patience. At a range of three and three-quarter miles, so as to give full play to the main armaments of his battleships and armored cruisers, Admiral Togo began a terrific cannonade, and rained shells with diabolical accuracy upon the leading ships of the Russian Fleet. Suddenly brought face to face with the enemy in full power, Admiral Rojestvensky hesitated, his fleet became confused, Admiral Kamimura raced to cut off his retreat, and the issue was decided. "The enemy," says Admiral Togo, "opened fire at 2.8," and later on in his despatch he records that "the result of the battle was decided at 2.45"—thirty-seven minutes. What followed was merely a battue.

Confusion of Russian fleet.

The fight began at Okinoshima and continued over a width of seventy miles for a distance of two hundred and thirty miles before the destruction was complete. The Russian gunners forming the crews of the 6-inch guns could do nothing at so great a distance under the rain of shells which fell upon them, and the efficiency of the men who manned the 10-, 12-, and 8-inch weapons of the Russian ships was also unequal to engaging in battle with rough seas causing their vessels to pitch and roll. The gunner's difficulty in a long

range sea-fight is not direction, but elevation, and only those who have watched manœuvring fleets firing in a heavy sea-way can fully appreciate the immense difficulties which naval seamen must combat in their attempts to fire accurately as well as straight. Not until the Japanese were satisfied that the long range fire had reduced the Russian Fleet to a disordered mess, did their men-of-war draw into a shorter range. The gateway by which the foe had entered the stage prepared by Admiral Togo had been sealed owing to the superior speed of Admiral Kamimura's armored cruisers. "At twilight," Admiral Togo states, "our destroyer and torpedo flotillas gradually closed in upon the enemy from east, north, and south, and let loose their horde of torpedoes. Little of the Russian Fleet survived this terrible night's work."

Thanks to the better steaming of his ships, the Japanese admiral was able to send forward a strong squadron to get across the face of the Russian Fleet. The "Daily Telegraph's" correspondent states: "Now the superior speed of the Japanese Fleet proved a tremendous factor. With every ship doing her best, Admiral Togo went full speed ahead. It was a short but exciting race. When the Japanese had obtained a sufficient lead they turned, and formed a barrier right in front of Admiral Rojestvensky, whose position from this moment onward was hopeless. This new

Superior speed of the Japanese ships.

Japanese formation was like a crescent, or nearly a half circle, and pressing down from the north it formed an impassable barrier on the road to Vladivostok." Admiral Enquist again records: "The enemy's tactics were directed to preventing us from getting through to Vladivostok. Every time our squadron attempted to steer northward, the Japanese, thanks to their superior speed, headed off our columns, their battleships concentrating their fire on our leading battleship." Again, describing the manner in which the Japanese encircled them, the Russian admiral says: "Owing to the low speed of our ships, it was difficult to escape from this position."

Of the great armada which Russia had fitted out with so much boasting and parade, there remained by Monday morning only four cruisers and two destroyers which escaped, apart from the two battleships and the two cost-defense ships which were forthwith taken to Japanese ports as prizes. It is calculated that in the battle about 14,000 Russians were drowned, and Admiral Togo claims to have secured over 3,000 prisoners. Admiral Togo's tactics were marvelously successful. In achieving the great task of wiping the Russian Fleet off Far Eastern seas he lost only three torpedo boats, while the casualties in the whole of his fleet were merely 113 officers and men killed, and 424 officers and men wounded.

Relative losses.

[Atlantic Yacht race won by the American *Atlantic*. King of Spain's life attempted in Paris. Earthquakes in Montenegro and Mont Pelée. Separation of Norway and Sweden. Treaty of Peace signed at Portsmouth, N. H., by the Japanese and Russian Envoys. Admiral Togo's flagship destroyed by an explosion. Count Witte appointed chief Minister of Russia. Korean Government transferred to control of Japan. Norwegian Parliament elects Prince Charles of Denmark King of Norway. He assumes title of Haakon VII.]

King Haakon VII of Norway.

THE SEPARATION OF NORWAY AND SWEDEN

(A.D. 1905)

HENRY SETON KARR

NORWAY as a kingdom has existed for over a thousand years, and even in the remotest ages of her history possessed a standard of culture that few northern nations could equal, as is witnessed by the old Norse laws and institutions, and by her ancient literature (the Sagas).

Antiquity of Norway.

For nearly 400 years before 1814 Norway and Denmark were united under one crown, Christian I., King of Denmark, being elected King of Norway and crowned at Trondhjem in 1449. But the foundation of the present trouble may be said to have been laid in 1814, at the time of the general upheaval caused by the Napoleonic wars, and the consequent rearranging of the map of Europe. Denmark took the wrong side, as it turned out, and allied herself with Napoleon when his power was broken. Sweden, on the other hand, joined Russia, and so, when the Allies emerged victorious from the historic struggle, Denmark was punished by being deprived of the crown of Norway, which, by the Treaty

Union with Denmark.

of Kiel in January, 1814, was proposed to be handed over to Sweden as a reward for Marshal Bernadotte's assistance against his former chief. Prior to this, Bernadotte, by a strange romance of history, had been adopted as Crown Prince of Sweden in 1810 by the childless King Charles XIII.

Sweden assumes control.

But the Norwegian people had to be reckoned with; and, when tidings came of the Treaty of Kiel, these hardy Norsemen promptly declined to be handed over to a new monarch in this cavalier fashion.

Unrest in Norway.

A gathering at Eidsvold was held in February, 1814, and Prince Christian Frederick, then a Norwegian Stadtholder, and afterward King of Denmark, was appointed Regent. This was followed by a further meeting of a representative body of Norwegians, also held at Eidsvold, on the 20th of April, when the present Constitution was drawn up, and on the 17th of May it was agreed to by all present amid a scene of great enthusiasm. On the same day Christian Frederick was chosen King.

The revolt of 1814.

After this, events followed one another with some rapidity. Sweden proceeded to assert her claims by force, and Karl Johan Bernadotte led a Swedish army across the frontier; but the campaign only lasted fourteen days. After some unimportant skirmishing an armistice was agreed to, and the Convention of Moss was held on the 14th of August, at which

A brief war.

the allies, England, Prussia, Russia, and Austria, were represented. This convention abrogated the Treaty of Kiel. Karl Johan agreed to maintain the Norwegian Constitution, provided he was chosen King, and the Storthing was again summoned to consider the question. Christian Frederick's courage, however, failed him, and he resigned and left Norway on the day the Storthing met.

There was now no further difficulty, and the Swedish King, Karl XIII, was elected King of Norway by the Storthing on the 4th of November, 1814. The Crown Prince came to Christiania and swore to observe the Norwegian Constitution, and the next year the Rigsakt, or Act of Union, was passed by the Storthing.

Karl XIII. elected King.

This Constitution has been sworn to by every succeeding King of Norway and Sweden up to the present day. It thus appears that the Constitution (Grundlov), approved at Eidsvold on the 17th of May, 1814, is the Magna Charta of Norway, the guardian of her political freedom, the basis of her union with Sweden, and the document to whose terms all differences between the two countries require to be referred.

We now turn again to the Constitution itself, Here is its opening sentence: "The Kingdom of Norway shall be a free, independent, indivisible, and inalienable kingdom, united with Sweden under one king; its form of gov-

Norway's constitution.

ernment shall be a limited and hereditary monarchy."

Taking the Constitution as a whole, it is a most remarkable effort of the statesmanship of nearly 100 years ago. It has been pronounced, on high authority, as the most liberal of constitutions, one of which any modern nation might boast. Mr. Samuel Laing describes it as "a working model of a constitutional government, and one which works so well as highly to deserve the consideration of the English people." Under this Constitution, the same writer continues, "the Norwegian people enjoy a greater share of political liberty, and have the framing and administering of their own laws more entirely in their own hands, than any European nation of the present time."

A working model as law.

When things had settled down, Karl Johan tried to regain lost ground. Among other things he particularly wanted the power of absolute veto, which, under the Constitution that he had accepted, he did not possess. The sturdy patriots of the Storthing resolutely declined to entertain his proposal, and to this day the merely suspensive royal veto remains one of the most important features of the Constitution.

The King resisted.

On one occasion, for example, a few years after the union was entered into, the Norwegian Storthing passed a bill for the abolition of nobility, the country being too poor to

Abolition of the nobility.

maintain an aristocracy. Karl Johan took a different view. He looked upon this abolition as a blow aimed at his power in Norway, and twice refused his sanction. The bill passed a third time, under the Constitution became law, and so the people's will prevailed.

Sweden's attempts to gain power.

During the ensuing century, and up to the year 1905, several further attempts had been made on the part of Sweden to give the King greater power, and to bring the two countries into closer union; but the Norwegians always resisted these efforts, knowing full well the dangers of such a course for their independence.

The power of veto.

It will be seen, then, that the King of Norway and Sweden could exercise his veto only twice. The Norwegian Parliament possesses a right unknown in any other monarchy. When the same bill has been passed by three successive Storthings, it becomes the law of the land without the assent of the King. The King can thus delay a bill from becoming law for, say, seven to nine years. This should serve as a sufficient check upon any legislative assembly, while at the same time ensuring that the supreme will of the people shall ultimately prevail.

King Oscar's vetoes.

The late King Oscar on two other occasions refused his sanction to measures passed for the second time by the Norwegian National Assembly—namely, the bill for the admittance of the members of the Government

to the debates of the Storthing; and the bill for eliminating the symbol of the union from the Norwegian national flag. Both these bills, on being passed for the third time, became law. The late disagreement, which culminated in the respectful dethronement of King Oscar by the Norwegians, had existed for twenty-five years. Norway wanted a separate consular service, which the Stockholm Government had declined to grant. The Storthing passed a law accordingly; it was duly presented to King Oscar by the Norwegian Cabinet at Stockholm; but the royal assent was unhesitatingly refused.

The Storthing then took a startling and unprecedented step. The resignation of the Ministry, having been tendered and declined, the King knowing full well that it was impossible to get any one else in Norway to carry on the Government in face of the opposition of a united people, the National Assembly met on the historic June 7, 1905, and, in effect, formally deposed the King. The concluding words of the President of the Storthing, Herr Berner, on this momentous occasion, are worth recording. In the midst of an impressive silence, all standing up, the President moved the following resolution:

Deposition of the King.

"As the members of the Council of State have resigned their office, and as His Majesty the King has declared himself unable to form a new Government, and as the constitutional

A new government formed.

royal power has ceased to be operative, that the Government which has just resigned should be empowered to carry on and exercise the authority (which they had formerly received from the King) in accordance with the Constitution of the kingdom, with the necessary alterations; that the union with Sweden under one king is dissolved in consequence of the King having ceased to act as a *Norwegian* king."

Their action is the expression, so far, at all events, as an observer can judge, of the deliberate will of a united and homogeneous people; evoked by ninety years of international friction, and finally culminating in (let us hope) peaceful but determined separation.

Peaceful but determined separation.

[Greek premier Delyanni assassinated. Japanese won cavalry engagement. Railway accident on New York Central (21 killed). Prefect of Moscow assassinated. Bomb thrown at Sultan in Constantinople. Surrender of Russian Governor of Sakhalin with 4,000 men. President Roosevelt received the Peace Plenipotentaries on the U. S. *Mayflower* in Oyster Bay. Peace Plenipotentiaries held first session in Portsmouth, N. H.]

PEACEMAKING AT PORTSMOUTH

(A.D. 1905)

J. C. O'LAUGHLIN

WE SAT around the hotel on that fateful Tuesday morning, waiting to hear from the conference room in the Portsmouth Navy Yard, where the plenipotentiaries of Russia and Japan were deciding the question of peace or prolongation of the war. The air was surcharged with electricity. The young girls, who had contributed the lighter side to this serious business, sang and frolicked, but they wore on our nerves, and we got up and stared expectantly at the silent telephone over which the news would come. Hanging restlessly about the edge of the crowd were a few members of the Russian suite who had been excluded from the Conference. Near them, equally restless, were a couple of Japanese—Takeshita, the naval *attaché* at Washington, and little Hanihara—and some newspaper correspondents from the Land of the Rising Sun. I joined Captain Roussine, who is the naval adviser of General Linevitch, and Colonel Samoiloff, who was military *attaché* of Russia in Tokio before the war began. "We knew war was coming," the

Peace or prolongation of the war?

Colonel explained, "months before the Japanese attacked." "I had my trunks packed in January and expected to receive my passports at any moment," Captain Roussine interrupted. "Before I left Manchuria, General Linevitch, General Kuropatkin, and the rank and file of the army told me to say to M. de Witte that Russia should not make humiliating concessions. We are in a position now to gain victory. A merchant, a Russian merchant, came to me on the train and urged me to oppose with all my strength any attempt to make a humiliating peace."

Russian pride.

I went over to the Japanese. They were nervous. They had been given to understand that concessions, large concessions, would be made. They did not know their extent. Japan would not accept half of Sakhalin; she must have all. It was hers by historic association, hers by right of conquest. She would insist upon indemnity. Russia could not expect to have peace without paying for it. The Japanese people would never approve a treaty which did not contain a provision for the payment by Russia of at least $600,000,000. I returned to the Russians. We walked over to the annex of the hotel, which formed the Russian headquarters. We entered Roussine's room and talked of the weather—it was a beautifully sunny day—of the characteristics of De Witte, then of the inevitable Conference. "We will go this afternoon," said Samoiloff. "Yes,"

Anxiety of the Japanese.

said Roussine, "there's no doubt about that." The door swung open. General Yermoloff, the military adviser of De Witte, appeared. "It's peace," he cried. "The Japanese have given in." "It's peace!"

Nobody stopped to ask for details. We ran to the main hotel to get the official bulletin. The telegraph instruments were clicking at a furious rate. The newspaper correspondents, American, Russian, Japanese, French, German, English, Italian, Argentinian, were writing at breakneck speed. To all sections of the world the news that peace had been agreed upon was being bulletined.

The Russians had no chance. The men who were not newspaper correspondents, but bankers or brokers or anything else they chose to call themselves, gathered in little groups. "It is the most magnanimous act of history," one said. "There is no parallel. Here the conqueror, acting solely in the interest of humanity and civilization, surrenders his right to territory which his troops occupy, and to indemnity to which he is justly entitled. It is great, heroic." Another voice broke in: "It is a diplomatic triumph of the highest order. De Witte scores hard. He has outgeneraled Komura and Takahira. He gave in on points which had been determined by events. He gave up half of Sakhalin. He reduced the question to one of money. No nation with a pretense to civilization could A magnanimous act.

afford to fight over a question of lucre. Japan was forced, in part by public opinion, which De Witte cleverly had created, and by the corner into which she had been driven, to give in. The question was narrowed down to this: 'Shall Japan make peace without indemnity, or shall she continue the war for indemnity? It was De Witte who did this.'" The conversation stopped for a moment, and then one who had listened said judicially: "It is not De Witte's triumph or Komura's triumph. The diplomatic victory of this Conference belongs neither to Russia nor Japan. It is our triumph, the triumph of our President, Theodore Roosevelt."

The triumph of President Roosevelt.

As one who has learned a great deal of what the President has done, I can say with emphasis that this is absolutely true. Immediately after the battle of Liao-Yang, a little more than a year ago, Mr. Roosevelt sounded both Powers as to whether they would make peace. Japan informed him of her terms. Russia decided to fight on. The battles of the Sha-ho and Mukden were fought. After each, the President approached both belligerents and urged them to make peace. It was done tactfully—in the case of Japan, with no intention to apply pressure to force her to stop the war; in the case of Russia, with a delicate consideration of the smarting wounds from which she was suffering. After Mukden the President found Japan's terms more severe

than they had been after Liao-Yang. While Rojestvensky's fleet was still "in being," he urged Russia to enter into peace negotiations with Japan. The Czar, with that obstinacy which is the predominant feature of his character, preferred to send his untried ships against the battle-scarred veterans under Togo's command. When Rojestvensky was defeated the President moved quickly. He went from Russia to Japan, from Japan to Russia. He sought to induce them to enter into negotiations. He found Japan willing, Russia sullen. He used Germany and France. He was successful in the end, and addressed to the belligerents his formal appeal of June 8, in which he begged them to make peace, directly and exclusively between themselves, in the interest of humanity and civilization. He bridged over the distrust and suspicion which divided the fighting states; he communicated to one the names of plenipotentiaries appointed by the other; he favored Europe as the place of meeting, but Japan refusing and Germany urging, he assented to the United States as the scene of the Conference. At last De Witte and Rosen, and Komura and Takahira, stood beside him on the *Mayflower,* in sight of his home at Sagamore Hill, and then he felt that one of the great difficulties of his task had been solved. He had accomplished this, not altogether because he was the President of the United States, but because he was

The work of Theodore Roosevelt.

Theodore Roosevelt, a man of action, of energy, who cut through the red tape of international etiquette, fearing no snub in such a cause, who was prepared to use every rightful instrument that came to his hand in order to reach the high goal upon which he had fixed his eyes.

When the President bade Godspeed to the plenipotentiaries at Oyster Bay, he left them to their own devices so far as concerned the negotiations. They came to Portsmouth, the Japanese by sea and De Witte by land (the landing of De Witte at Newport threw the Japanese and some distinguished officials into a flurry). They enjoyed a luncheon in the conference building, where no one sat down because of apprehension that the Russians or the Japanese would feel slighted if they were placed at the left instead of the right of the host. They were shown the apartments which had been reserved for them—the long conference room, with its luxurious furnishings, its Turkish rugs, and its chairs suited rather for big De Witte than for little Komura; the private offices of the Japanese and the private offices of the Russians—all fixed up in the short space of five days. They went from the Navy Yard to Portsmouth, where they were received by Governor McLane and his staff, and by the townsmen and the countrymen, and by the gaudy military who had nearly crippled the appropriations of the

Arrival of the plenipotentiaries.

State by their inability to subsist twenty-four hours without eating.

De Witte knew that while he had full powers to "negotiate, conclude, and sign" a treaty of peace, his authority was limited by precise instructions: "Not a single foot of territory, not a kopeck of indemnity." He was prepared to take responsibility, but he understood, in view of the hatred which the Czar entertained for him, that he would do so at his peril. If he made concessions which were not approved by Imperial Russia, he appreciated that he would perhaps be ruined or condemned by the war party, and in all probability by the Czar himself.

De Witte's limitations.

This is the first time in the history of the world probably that negotiations were conducted in four languages. The Japanese were insistent in the beginning that their language should be recognized, and the Russians were equally firm in speaking their native tongue. French and English were made the official languages, and were the common basis of discussion.

Four languages.

These were the little evidences of the deadly enmity which existed between the two peoples who had sent representatives to arrange peace. On the part of De Witte and Komura, and Rosen and Takahira, there was a spirit of conciliation, of deference which made success not only easier of accomplishment but actually possible. When the Japanese first arrived,

they did not believe there had been any change in the diplomacy of Russia. They remembered the shilly-shallying before the war, the prolonged discussion of every point, the inexcusable and tormenting delay. They thought: "Russia has demonstrated she cannot fight so far from home. She has internal troubles. She must make peace. If De Witte and Rosen adopt a strong attitude we will know it is a bluff. They will come to the terms we really want. We will give way on certain conditions, but we will stand firm on the others."

The shrewdness of M. de Witte.

But there was no bluff about De Witte, and with the shrewdness, the perspicacity, the clairvoyance even, which are distinguishing characteristics of these wonderful people, and especially of the two able diplomats who represented them, it was not long before it was established that Russia would go to a certain limit and there stick.

As soon as he knew the extent of the Japanese conditions, M. de Witte mapped out the grand lines of his campaign. He frankly told Komura that some of the demands were impossible, and he indicated that he was prepared to break off the negotiations. Such a result would not have suited Japan. In coming to the Conference, she placed herself at a disadvantage. She knew she would have to reveal her terms, and if the world considered them unreasonable might experience a loss of

public sympathy. Interruption of the negotiations would enable the Czar to attempt to bring Germany and France to her support on the ground that the ambitions of Japan threatened the whole white race, and by publication of the terms in Russia cause the people to unite in defence of their country. Komura suggested, therefore, that the demands be discussed in detail. When he made this suggestion, every one breathed a sigh of relief. The first difficulty had been overcome. The first demand required Russia's recognition of Japan's preponderating influence in Korea, in brief the abandonment by Russia of all pretensions in that kingdom. De Witte recognized the *fait accompli*. He agreed to the demand, provided Japan recognized the independence and territorial integrity of Korea, and would do nothing without the consent of the Korean Government, and take no steps which would deprive Russian subjects and Russian commerce of the most-favored-nation treatment. Japan wanted no restrictions. De Witte was unyielding. He won. Then De Witte agreed to the evacuation of Manchuria, insisting, however, that it be done simultaneously, and to the "open door" in that province, which involved the surrender of all exclusive privileges enjoyed by his Government. He gave up all right to Port Arthur and the Liaotung Peninsula without a struggle. There was comparatively little difficulty up to this

The first sigh of relief.

The Korean question settled.

point. In order to develop Russia's intention, the Japanese had placed the cession of Sakhalin as the fifth of their twelve demands. When it was reached, De Witte said quickly and emphatically:

Sakhalin the bone of contention.

"I refuse to discuss that demand. What shall we do next? Shall we proceed with the other demands or shall we break up?"

There was silence. Outside was heard the tramp of the sentry. Baron Komura paused a moment in silent thought.

"I think it would be much better," he answered suavely, "to continue the study of the points which have not been reached."

"That was the first time," a Russian said to me, "that I believed there was a chance of peace."

A break on the first three punitive demands was avoided by the envoys agreeing to pass them over for the time being. They were not matters of much discussion. De Witte declared his Government would never pay a kopeck, not a kopeck. It would continue the war. Nor would it be humiliated by surrendering ships which had been interned, and by agreeing to limit its naval armament in the Far East. On this latter point he was willing to make a concession, to declare that Russia had no intention at this time of organizing a formidable naval force and stationing it in the Pacific. Coming to the twelfth—the fisheries demand—he consented at once. Before

he left the conference room he said to Baron Komura and Minister Takahira that Russia had given in where it had been possible to do so. "We have reached the limit of our concessions," he added; "we can do no more."

The Russians swore they would not give up an inch of Sakhalin Island. It was strategically of the greatest value. If Japan occupied it, the Sea of Japan and the Sea of Okhotsk would be closed. Egress to the Pacific would be absolutely under Japan's control. They could not, would not, have it. Russia would fight on. When the winter came and the straits separating the island and the mainland were frozen, they could cross the ice and recapture it. The island had the same relation to Vladivostok that Long Island has to New York. If Great Britain were to demand Long Island, how long would the American people resist it?

That was the way the Russian mission talked. It was bluffing, or rather it was acting in good faith, but the Government at St. Petersburg was cabling it one way and discussing the question with the American Ambassador in another way. When the deadlock occurred, President Roosevelt, in spite of his original declaration that the negotiations should be conducted exclusively between the belligerents, stepped in. He cabled to Meyer. Three times the Ambassador saw the Czar. He induced his Majesty to agree to give up

Roosevelt breaks the deadlock.

half of Sakhalin. De Witte got the instruction and was told that this was the last word of Russia. Under no circumstances would indemnity be paid. The President cabled to Griscom. The American Minister at Tokio struggled with the Japanese Government. De Witte presented to Komura his proposal regarding Sakhalin. Komura regarded it as unacceptable, but consented to cable it to Tokio. That was on Saturday. It was a blue day. "Only in the work of President Roosevelt," members of both missions said, "is there any chance of peace." Roosevelt sent messages and letters to De Witte and Komura. Sunday there was no change in the situation. The Russians were preparing to leave. On Sunday night, Takahira appeared at De Witte's apartment. He had received a message from Tokio, saying that the telegram of Komura and himself regarding the Russian proposal had arrived too late to permit of consideration on Saturday. He told De Witte he must request postponement of the session on Monday, which was to be the last, until Tuesday.

The cable "gets busy."

The next twenty-four hours was a time of anxious waiting. On Monday the rumor spread that Japan would make concessions. De Witte knew nothing of it. "I have a faint hope, a faint hope of peace," he acknowledged. He based the possibility, not upon his own instructions, but upon his belief that

Anxious moments.

Japan would make concessions which he, not the Russian Government, might consider. During the night he received a message from the Emperor, directing him to break off negotiations should Japan not accept the proposal for the division of Sakhalin. M. de Witte determined—and here was a fine example of the boldness of the man—not to obey his instructions if Japan made any concession that might be acceptable.

Rumors of Japanese concessions.

The Japanese mission, as it has been always, was silent. It proposed to speak when the moment arrived—not before. The meeting was arranged for 9.30 Tuesday morning.

The Japanese lost no time in acting when they were informed that the Russian mission had arrived. Takahira went to the private office of De Witte. He rapped on the door. De Witte was bending over his desk and did not hear him. He rapped again, a little louder. Still De Witte did not hear him. He rapped a third time. De Witte looked up and then rose. "Good-morning," said the Minister, "where is Baron Rosen?" Hearing the Minister's voice, Rosen came into the room. "I suggest a private meeting," Takahira said. The suggestion was adopted. Then Komura arrived, and he and Takahira and De Witte and Rosen passed into the conference room.

I have asked all the envoys to give me the details of that conversation, but they refused. All that can be stated is that after a short talk,

while the secretaries on both sides anxiously wondered and speculated as to what the Japanese were saying, De Witte re-entered his private office. "The Japanese yield," he said, his face working with emotion. Tears sprang to the eyes of one of the secretaries. De Witte said: "The secretaries will come to the conference room. The official meeting will begin at once." He gave a few instructions, and then his subordinates, almost dazed by the unexpected act of Japan, went to the conference chamber.

"The Japanese yield."

The envoys and their subordinates took the usual seats. One of the participants said: "It was quite the ordinary routine meeting. M. de Witte began the conversation. 'I have no further concessions,' he said. 'Russia will not agree to indemnity in any form. We will agree to divide Sakhalin Island. That is the last word of my sovereign.' Baron Komura suggested that Japan would waive the indemnity and keep all of Sakhalin. 'I can not accept any such proposal,' M. de Witte replied. 'Russia will cede only half of the island.' Baron Komura remained silent for almost a minute and then he said quietly: 'We agree.'"

That is how the peace of Portsmouth was made. It was a *dénouement* that was sensational, not in the way in which it occurred, but in the decision which permitted it. When De Witte returned to the hotel for luncheon,

he was received with enthusiastic cheers. I was among the dense crowd that gathered around him, eager to learn the conditions Japan had given. Cheers for De Witte.

"It is peace," he said, "peace!"

"And the terms, Excellency?"

"Japan accepts our ultimatum. We pay not a sou."

Later in the afternoon the Japanese envoys returned to the hotel. There was the same crowd, the same enthusiastic cheering. Before, it was the man who was applauded, this time it was not the men, not the country, but the magnanimous spirit which had caused Japan to forego compensation for the blood and treasure she had spent in vindicating what she and the world regarded as her just claims. Some say it was fear of the loss of public opinion of the world that forced Japan to this step; they are wrong. Some say it was fear of Russia; they, too, are wrong. But it was true that Japan had reached the limit she had fixed for her military operations, had established her supremacy in Korea and Southern Manchuria, acquired the Liaotung Peninsula, half of Sakhalin, a railroad line, and fishing rights, so necessary to her people. She felt that even if she occupied Siberian territory, still she would be unable to extort indemnity from Russia. So she quietly accepted the Czar's refusal and did so in a way that deserves the admiration of the world. Cheers for the Japanese.

[Anglo-Japanese treaty signed in London.

Czar grants Constitution to Russia.

Czar grants Constitution to Russia. Wreck of the Great Eastern express at Witham (many killed). Bomb explosion in Barcelona (160 injured). Treaty of Peace between Japan and Russia signed in Portsmouth. Victoria Falls Bridge opened.]

THE VICTORIA FALLS BRIDGE

(A.D. 1905)

GEORGE ANDREW HOBSON

THE Victoria Falls of the River Zambesi are situated on the boundary which divides the administrative Provinces of Northwestern and Southern Rhodesia in the territory governed by the Chartered Company of British South Africa. They lie about 6° within the Tropic of Capricorn and about midway between the shores of the South Atlantic and Indian Oceans.

The Falls were unknown to civilization until their discovery in the year 1855 by David Livingstone; and owing to their remote position and the great difficulty and expense of reaching them, one of the grandest spectacles of Nature remained almost unvisited by white people until well within the last decade.

Discovery of the Zambesi Falls.

The Victoria Falls, named by their discoverer after the late Queen, now possess a railway-station for passengers and goods which is situated on the main route of the railway projected by the founder of Rhodesia to connect Cape Town with Cairo; and a bridge close by the cataract carries the railway across the grand chasm formed by the River Zambesi.

The rails reached the bank of the river in May, 1904, the distance from Cape Town on the south being 1,641 miles, and from Beira on the east coast, 950 miles. Twenty years before, it took over six months' trekking with oxen to get there from the sea. Now the distance is easily covered in a few days.

The survey of the ground for the bridge was made during the time the Boer War was raging; communications southward were cut, and the construction of the railway was much delayed but never quite suspended, through military operations. In 1901, after the siege was raised, and Mr. Rhodes was released from Kimberley, he was shown at his office in London a sketch of the bridge it was then proposed to build. Although he had never visited the locality he was sufficiently familiar with it from travellers' descriptions and engineers' surveys to indicate in a general way the point of crossing. He determined that passengers in the trains going over the bridge should have a view of the Falls; and as the site upon which the bridge now stands is practically the only one which could fulfil this purpose, it may be said to have been chosen by him. The preliminary design of the bridge above referred to was prepared to meet Mr. Rhodes's views, and it received his approval.

Cecil Rhodes wants view of Falls from bridge.

The choice of the site was finally governed by the natural formation of the walls of the chasm, advantage being taken of the mini-

Choice of site.

mum distance to be spanned, combined with the soundest foothold obtainable. The position fixed upon is about 700 yards below the cataract.

The profile of the chasm at this spot is very striking. The width at the top is approximately 650 feet, whilst the depth from the general level of the ground to the surface of the water below is about 400 feet. The left or north bank of the river is an almost perpendicular cliff, but the opposite bank has a shelf about half way up, and the whole region is composed of erupted rock, mostly basalt. The general level of the surrounding country is 3,000 feet above sea-level.

Difficulties met with in construction of bridge.

The rock being very hard, the bridge was designed to fit the profile of the gorge with as little expenditure on excavation as possible; and it would have done so, but for a mistake made by the surveyor in concluding that the rock on both sides was solid. The mistake was perhaps excusable, and was not discovered until the vegetation which thrives in the hot sun and the spray from the falls had been removed, and the work of clearing the ground and the excavation of the rock had proceeded for some time. It was then found that the shelf on the right bank on which it was intended to rest one end of the principal span was covered to a considerable depth with *débris*. By the time the error had been discovered, the preparation of the steelwork was

too far advanced to permit of any alteration being made in the structure. The difficulty had therefore to be overcome partly by increasing the depth of the concrete foundations, and partly by lowering the level of the entire bridge to the extent of 21 feet; but both time and money would have been saved had the true facts of the case been recognized at the beginning, the span designed 25 feet longer, and the truss increased in depth at the ends by 20 feet.

Type of bridge.

So far as the type of bridge was concerned, there was no difficulty in making a choice. Several kinds were considered, but the nature of the situation and the purpose of the work made it obvious that a two-hinged, spandrel-braced arch was the only one worth considering, as it completely and satisfactorily answered all the requirements in the case. These may be summarized as:—(1) Handsome appearance; (2) Rigidity; (3) Economy; (4) Ease of erection, cantilever-wise, without scaffolding. A steel arch of this character was therefore designed to spring from the rock walls of the Zambesi chasm, to be erected cantilever-wise simultaneously from both sides. The best, though not the earliest, example of this type is the bridge which in 1897 replaced the suspension-bridge and now carries the Grand Trunk Railway over the Niagara Gorge.

Each main girder of the Victoria Falls

Bridge is a spandrel-braced arch standing on two hinge-pins, and is similar in principle to the Niagara Falls girders; it differs from the latter, however, in the span, the depth, the load, the roadway, and all the details of construction. The means adopted in erection also differed radically from those employed at Niagara, being simpler and cheaper.

[Peace treaty between Japan and Russia signed by the Mikado and Czar. Centenary of the Battle of Trafalgar and death of Nelson celebrated. Mikado and Admiral Togo present at great naval review in Tokio Bay. Freedom of City of London presented to General Booth at Guildhall. Oscar of Sweden renounces crown of Norway. Rioting in Odessa and Warsaw. Massacre of Jews in Russia. Czar granted Constitution to Finland. Floods in Cape Colony. German Socialist Congress opened in Jena. International Art Congress opened in Venice. International Congress on Tuberculosis opened in Paris. Mikado entertained officers of the British China Squadron. Sir Henry Irving died. Prince and Princess of Wales visited India. Resignation of Balfour. Bill passed for separation of Church and State in France. Lewis and Clark Exposition closed.] Centenary of Battle of Trafalgar

THE GREAT DIVORCE IN FRANCE

(A.D. 1905)

RICHARD HEATH

NOTHING more important ecclesiastically has occurred in Europe since the Reformation—even the struggle in Italy has not been carried so far as this new law carries it in France. The facts, moreover, have a special interest for all countries having State Churches, whereas in Italy the situation is quite peculiar. To begin with, the Separation has not been by mutual agreement, but the State has acted like some Oriental husband, and on its own responsibility has itself put away the Churches. France has taken Official Religion to the door and, giving it all and more than all it could justly claim, has bid it begone. Thus a connection ceases which except for a short period prior to the Concordat has lasted for fifteen hundred years. Surely this is a very great and portentous fact, occurring as it does in a country than which none is intellectually more influential in Europe, and which for thirty years past has politically been gaining in stability and moral influence.

Separation of Church and State.

The crisis which brought about the final

act of divorce was only the occasion, the real cause being the utter incompatibility of the temper of an ultramontane Church with that of a State not only sincerely republican, but fast becoming socialistic. The new conscience in France and the old have now for more than a century been at war and the determination of the State no longer to allow the Churches to be part of itself must have taken place sooner or later. The longer it was delayed, the worse it must have been for the weaker party.

This, it is evident, has been the conviction of the more thoughtful Catholics, and may account for the fact that the struggle has turned more on the details than on the principles of Separation. One wonders whether it must not be really welcome to the Church, in spite of all the apparent opposition. For there can be no doubt that the articles of the Concordat were in their nature despotic. Napoleon treated the Roman Catholic Church as a conqueror treats a people he intends to enslave. Under cover of an article giving him unqualified police authority over the Church, Napoleon introduced a series of regulations which enabled him to keep the Church under his feet. No papal bull or brief, or official document emanating from Rome, could be distributed in France without his permission. No papal nuncio, legate, or other representative of the Pope could inter-

The despotic Concordat.

fere in the affairs of the Church in France without his authority. This it might have been said was only to reaffirm the old Gallican position; but it made all the difference whether that position was under the control of a Government steeped heart and soul in Roman Catholic ideas, or under that of a Government to whom those ideas were "a farrago of nonsense." Napoleon bound the bishops hand and foot; he chose them, the Pope giving them canonical investiture. They had to take an oath of obedience to the French Government, to refrain from taking part, in and out of France, in movements dangerous to its peace, to inform the Government of any movements of the kind which might come to their knowledge, and not to travel abroad without its permission, even at the order of the Pope. The Church evidently considered it a sufficient set-off to this enchainment to find itself once more an established religion in enjoyment of a budget of religious worship and thus a department of the French State. It must have regarded the position as a vantage ground from which it would be able to recover all it had lost, since to obtain and keep it it was willing to endure so many humiliations, among others to share its position as a religion paid by the State with the Protestant and Jewish Churches.

Napoleon's control of the clergy.

Under Pius IX. and Leo X. it played a leading part in French political history, not-

withstanding the Concordat. Now comes Pius X., who in the ardor of his faith, or as the tool of a party bent on a new policy, upsets the Concordat and drives the French Government to take action.

In resolving to face the difficulty by completely cutting the connection with Rome, the Government has had with it the great majority of the Chamber of Deputies, and there is every reason to believe that the country will approve of what has been done. That the former is the case is seen in the voting, which at many stages of the Bill has averaged a majority of over one hundred, and the latter bye-elections, which seem very favorable to the parties supporting the Separation affirm.

Parliamentary procedure.

The Parliamentary procedure by which this important measure has been successfully carried out strikes a blow at the oligarchical method prevailing in most Parliaments, by which two parties carry on the Government of a country to the exclusion of all who are not connected with either one or the other. In France this system has resulted in giving to the Conservatives, though in the minority, the power to arrest important progressive legislation. Now by the institution of the *Bloc,* the various Parties of the Left—the Democratic Union, Radicals, Radical Socialists, Extreme Left, Socialists, and Independent Socialists—have united to support this particular measure, each Party being represented on the

Commission deputed to draft the Bill and carry it through the Chamber. Nominated by lot in the eleven bureaus representing the various political Parties, the result has proved successful, the members of the Commission having shown singular unanimity in drawing the Bill, and patience, moderation, and willingness to listen to every criticism of it.

Briand chiefly responsible for the measure.

The reporter of the Commission, M. Aristide Briand, is chiefly responsible for the measure, and it has been through his energy, address, wisdom, oratory and sympathetic understanding of his various opponents that the Bill has been piloted past the rocks and shoals which have endangered its course all through. He has had a devoted henchman in M. Jaurès, the celebrated Socialist leader and orator, and he has been well supported by M. Bienvenu-Martin, the Minister of Public Instruction and Worship, and by other Socialists. Some, however, in the various Parties of the Left have not been so well satisfied that the measure is really for the best, and about half the numerous amendments which have blocked its progress have come from them. They have undoubtedly had good reason to be dissatisfied, for as the discussion has advanced, Briand and Jaurès have betrayed signs of willingness to assuage the bitterness of the opposition of the Right and of the Centre by many concessions.

The Minister of Public Worship, speaking

on the Bill in the Chamber of Deputies, said: "After the Separation . . . the Church (Roman Catholic) will possess wealth to the amount of three hundred millions of francs. In addition to this it will have all the buildings in which it now carries on worship for an indefinite period, gratuitously, and the buildings in which its bishops and parochial clergy are lodged at a low rental on short leases."

Church Buildings.

LEWIS AND CLARK EXPOSITION

(A.D. 1905)

RICHARD LLOYD JONES

THE main entrance to the Lewis and Clark Exposition is on the Missouri River. The real show of 1905 is the mighty, throbbing, earnest empire of our proud Northwest. President Jefferson gave to Lewis and Clark a higher commission than that of merely piercing the great wilderness to find out how the continental waterways took their course to the Western Seas. The expedition that started up the Missouri River in awkward, hand-made paddle craft, one hundred and two years ago, was born of imperial dreams. The mammoth errand was keystoned by something better than idle curiosity, and the ridiculously small Congressional subsidy of $2,500 for that vast enterprise was the greatest investment the United States ever made. Whosoever doubts it should in this Centennial year take the steel-railed trail, and in palace-car luxury traverse in three days the vast wonderland that engaged the pioneer explorers for more than two long years.

Imperial dreams.

The Louisiana Purchase Act excepted, the Lewis and Clark Expedition is the greatest

expansion act spread upon our national records. After a century of pioneering, the wild nation of Indian and elk has crystallized into a civilization that expresses one of the greatest industrial conquests known in the history of the world.

A great industrial conquest.

Where Lewis and Clark encountered only buffalo, grizzly, and hordes of savage men, mighty cities have been builded wherein are centred industries of world-wide consequence. Near Mandan, where the first hard winter was spent among the hostile redskins, now stands Bismarck, the capital city of the great bread-producing commonwealth of North Dakota. The little remnants of the Mandan tribe have forgotten their fathers' resentment of the white man's invading three-board canoe, and the giant steam plow has erased the badger's path.

The town of Bismarck.

Through the Yellowstone Valley, the arid lands, so depressing to the explorers, have been subdued by the culture of alfalfa, the sacred grass of ancient Rome. King of forage plants, it has been forced by agricultural science to spread an emerald carpet over the level desert stretches where formerly only the knotty sagebrush grew. Supplying as it does the richest food for cattle, sheep, and horses, it has converted the desert waste into a prosperous community that puts the good old Hoosier farms to a severe competitive test. These ancient desert fields have borne palaces

The culture of alfalfa.

and financed the making of great commercial cities. The same engineering and agricultural skill is reclaiming Wyoming, and will, in no far distant time, east of the Rockies as well as west, make kind and hospitable all the deserts of the long centuries. Neither Lewis nor Clark, nor Jefferson himself, could guess the worth of the conquest. They only believed that some time it would be worth something, and the century has well proved the wisdom of their faith.

The Rocky Mountains at once suggested wealth, and Captains Lewis and Clark, in reporting back the mightiest obstacle on their trail, said: "In future ages the bowels of these mountains will yield greater riches than the golden coast of Guinea, or even the Peruvian Sierras." Butte and Anaconda alone have long since vindicated this prophecy.

The other great find of Captains Lewis and Clark lies west of the Bitter Root Range. The great tract west of the water divide now trisected into the States of Washington, Oregon, and Idaho, is an empire in itself. Larger than France and Switzerland combined, it is infinitely greater in resources, and its scenery is superior to the grandeur of either the Pyrenees or the Alps.

Great wealth and wonderful scenery.

It is not extravagant to say that these far Northwestern States possess more wonderful possibilities of development than any other group of States in our Union. Their metro-

politan centres are already remarkable and eloquent exhibits of both the resources and the enterprise with which they are so richly endowed. Spokane, the industrial capital of the Inland Empire, lying between the Rockies and the Cascades, is perhaps without a rival the cleanest city in the United States. It is a city that has developed physically, socially, morally, and industrially. Founded by a horse thief scarcely more than twenty-five years ago, it is free from every trace of social vice and gambling. The common conscience is dedicated to high tasks, a striking contrast to such a city as Philadelphia, with its Puritanic foundation and sequence of sodden corruption. In ten years this frontier town has developed into a metropolis that should be an inspiration to the workers for municipal corrections in the older cities of the East. Spokane has broad streets, well kept. It has no city canyons like Nassau and Maiden Lane. It is a city of middlemen and homes. The manufactories, flour mills, saw mills, and sash factories clustered about the powerful and still unharnessed falls of Spokane create a distributed rather than a congested wealth. It is commonly American. Pauperism is a disgrace and not a circumstance. Thrift is the slogan. The humblest cottage is individual and distinctive. Its grass plots and vine-grown walls would compose an attractive cover for any country lover's magazine.

Spokane the industrial capital.

Twelve thousand carloads of dressed lumber and more than a million dollars' worth of flour shipped to Eastern cities last year demonstrate the potentiality of the infant city.

In the year 2000 A. D. New York's closest rival in the census race will be Seattle. To-day the Pacific metropolis suffers by excesses. It is bewildered by its own growth and lives by that indomitable determination which made Chicago, and was never known to fail. Its handicaps are philosophically accepted as its advantages. Its perpendicular streets are its ornaments—without them the rare setting of the city would be lost. Its hills are its boast. Seattle has ancient Rome "beat to death," for Seattle is founded on twenty hills instead of seven. Seattle is forehanded and ready to take care of the immigration that it knows must come.

Seattle the Pacific metropolis.

Where now go the frontier and the pioneer? No longer to the West. For centuries the world's emigration has been on latitudinal lines. Seattle is the pivot point in the twentieth century that has turned the pioneer northward and emigration on the longitudinal trail. The American frontiersman is to-day felling the trees of the Yukon Valley and building enduring cities at Dyea and Dawson.

Puget Sound is the greatest harbor in the world, and no single city can ever monopolize its commerce. Tacoma, doubling its population in the last five years, is scarcely less won-

derful than its northward rival resting on twenty hills. Tacoma supplies what Seattle lacks. On the broad flats stretching from the Puget waters toward Mount Tacoma's base are being built the factories and mills that will make Tacoma the substantial manufacturing centre of our long Pacific Coast. Tacoma as a shipping point can boast of the largest covered piers in the world, and of an available dock mileage greater than that now used by New York, Jersey City, and Philadelphia combined. Because Tacoma has more level land adjacent to tide-water than any other Puget Sound port, and because the life-supporting and wealth-producing resources of the Pacific Coast are nearly three times greater than on the Atlantic, Tacoma is destined some day to exceed in national importance any of the Atlantic seaboard cities, New York alone excepted.

Tacoma the great port.

Portland is the one big strong Pacific city that is not "out West." It is old, conservative, and substantial, resting on strong pioneer investments. It is lending money to-day to the very cities that are seeking to rob it of its commercial prestige. Like any good Massachusetts town, Portland has libraries, art museums, and historical societies.

Conservative Portland.

To-day the Oregonian city is three times as large and infinitely greater in commercial importance than the old Maine town from which it took its name. The Government

now proclaims Portland the greatest of all wheat shipping ports in the United States. Here is a town which alone and independent of the great Empire in which it is centred has more than vindicated President Jefferson's twenty years of impatience to expand to the sunset sea.

Portland was the ideal and logical centre for the Lewis and Clark commemoration. Every American is compelled to pass through our great wonderland to reach it, and the fair ground itself centres in superlative scenery.

Towering snow peaks.

The towering snow peaks of Mounts Hood, St. Helens, and Adams, linked by the long Cascade chain, put any artificial Tyrolean park to ridicule. Warships, ocean greyhounds, great trans-Pacific sailing vessels, and trans-continental palace trains, perpetually passing the exposition grounds, form a living transportation exhibit with which no other exposition has ever been able to compete.

The exposition.

The exposition itself is small and unimportant after the great shows of Chicago, Buffalo, and St. Louis. Notwithstanding, the Lewis and Clark Exposition has a distinguishing individuality. The Forestry Building is a working exhibit of the great timber resources of the Northwest. Constructed of huge logs felled along the Columbia River, it is perhaps the most unique architectural creation ever seen at a public exposition.

The water features, which so embellished

the shows at Chicago, Buffalo, and St. Louis, have been enlarged upon at Portland, and the two hundred and twenty acres of Guild's Lake will at night, by virtue of the submerged lamps, resemble a sea of phosphorescent water.

The European, Oriental, Agricultural and Horticultural, Mining, and Government Buildings, as well as the State Buildings and "The Trail" (the "Pike" and "Midway" of 1905), will have their full quota of attractions, as every exposition goer knows. But the real Lewis and Clark Exposition is outside the pine board fence. It is outside of Portland—it is more than Oregon. It is the whole great Empire of the North Coast States. The Rockies, the Yellowstone, the Columbia River, the Cascades, Alaska, Puget Sound, the Yosemite, Crater Lake, the Pacific Coast, and the greatest industrial growth ever developed in a quarter of a century make up the real exposition, and no American can afford to miss it. The lath-and-plaster palace at Portland is but an embellished terminal, a thing to create cheap rates and to induce every American to go and see his own.

Land conscience.

Oregon has for years been afflicted with a cancer known as the land conscience. It has fastened itself upon its highest as well as its humblest citizens. But there is yet good land in Oregon that has not been stolen, and the judicial disinfectant which the United States Government is now applying is fast reclaim-

ing much of the land that was "appropriated." The patriarchal beards were wise enough to lay claim to a good thing. Oregon is a great State. As an agricultural State it is as old and well tried as Minnesota, Kansas, or Nebraska. The Willamette River Valley is a matchless farming land. It was the Mecca of ambitious agriculturists before gold was discovered in California. The dairy products of that one valley alone amount to seven million dollars a year, and the prize beef at St. Louis last year came from there. It's a country where the farm hands get "well fixed" so fast there is no one left to milk the cows.

Prosperity and enterprise.

Coos County, Oregon, is typical of the enterprise, industry, and thrift of all the Northwestern States. There is a county of farmers and lumbermen with one hundred and twenty-five miles lying between it and the nearest railroad, and yet they erect at the Portland Fair a twenty-five thousand dollar building in which to exhibit their wares. What say you, Pike County, Indiana, to this? The banks of Oregon have deposits to the amount of $2,600 to every man, woman, and child within its borders, and Oregon is not the greatest of these States.

The lumber industry.

The lumber industry of Idaho, Washington, and Oregon—still in its infancy—is the greatest in the history of our country, and will be sufficient when developed to supply the building timber for all the world for centuries

to come. Already Portland and the Puget Sound cities are the greatest lumber-shipping centres in the world. In every Cascade canyon will be heard the burr of the buzz and the band saws. Lewis and Clark found our exhaustless timber lands.

But the greatest industrial conquest that has followed the trail of Lewis and Clark is the conversion of wasting mountain waters to the parched lands of the deserts. Irrigation is King. Ten years ago it was an experiment. To-day it is employing more than a billion dollars, and, though a giant, it has just begun to grow. It is the Antæus of American industry, doubling in power with every touch to earth. The hopeless interior of Oregon and Washington, as well as the great stretches of Idaho, are beginning to bloom. Wealth is being created from the great storehouses of water, sunshine, and soil. Five hundred thousand acres of Oregon's arid land will be transformed to a garden this year alone.

Value of irrigation.

But the wonderland in which it all is set is the marvel of largest measure. Americans go to Switzerland to see glaciers, not knowing that we have greater ones right here at home. The largest cave in the world is found in Idaho. Its chambers are often as high as five to seven hundred feet, and thus far the overwhelming enormity of it has intimidated the most daring, and only thirty miles of its underground course has been explored. Perhaps

The American Switzerland.

no country abroad, even Italy and Switzerland, can match the wonderful lakes and rivers and mountains of Idaho alone. The ride from Wallace to Spokane over the Cœur d'Alene lake is not surpassed even by the environs of Lake Como. Japanese themselves frequently admit that Tacoma is as majestic as their own sacred Fujïyama, and Mount Hood is a lofty peak rising far above the poet's reach.

But there yet remains the Valley of the Yosemite; Mount Shasta, the grand guardian of northern California, and, greatest of all, the Yellowstone, the peerless wonder of the world. Writers have toured the globe to see it and there laid down their pens. As Kipling has said, "Eyes may see, but it never can be told." That such a resourceful country, abounding in such natural wonders, should have become ours through the persistent faith and dogged perseverance of Meriwether Lewis and William Clark a century ago, should be the source of greatest gratitude in every patriot's heart, and the American who in quest of recreation and wisdom has been to Europe twice and never been to our Pacific seaboard once should realize that he is a fool.

Natural wonders.

The Lewis and Clark Exposition at Portland is great because of all it signifies. Let us not forget that a hundred years ago Briton and Frenchman and Spaniard were hammering at our gates. In our abundance and lux-

ury let us recount those rugged days when Indians beleaguered our wooden castles and wolves pawed our cabin doors. It required hero stuff to build our North Coast Empire, and upon an immortal four will ever rest that glory: Thomas Jefferson, the nation builder; Meriwether Lewis and William Clark, the Empire hunters, and the red-skinned girl Sacajawea, who led them to their conquest. In all the annals of history there is no story to surpass that of the Indian birdwoman who more than once saved the heart of that great enterprise from swift decay, and even denied her own papoose the long-saved crusts that the strength of our color-bearers might not fade. With outstretched arm she led a hostile race that they might build great cities over the graves of her kind. But for her the turrets and towers that rose along the trail might to-day fly the bunting of a foreign flag. She was the silent, faithful, untiring pathfinder who led the Stars and Stripes up Missouri's waters, over the great Rocky divide, and down the "Sunset River" to the great father of seas that white children might some day sing the song she herself had loved long before its words were framed, "My country, 'tis of thee, sweet land of liberty." She, like Columbus, believed that "one day with life and heart is more than time enough to find a world." In the hearts of Jefferson's brave explorers she kept that spirit aflame. And so we celebrate.

The immortal four.

The silent, faithful pathfinder.

[In 1906: American Society of International Law organized with Elihu Root as President. Diplomatic relations between France and Venezuela severed. House passes Philippine Tariff Bill. International conference on Moroccan affairs opened at Algeciras, Spain.]

Diplomatic relations between France and Venezuela severed.

THE ALGECIRAS CONFERENCE

(A.D. 1906)

BUDGETT MEAKIN

FOR nearly three months the usually sleepy little smuggling town of Algeciras, opposite Gibraltar, has been a centre of world-wide interest. On the invitation of the Sultan of Morocco, twelve of the powers in treaty relations with him had agreed to meet his delegates in conference for the purpose of advising him as to the best means of restoring his authority throughout his dominions and of increasing their prosperity. The actual motive for such a request had been the fear lest, as the British, whom the Moors had hitherto regarded as their friends —had, to use their expression—sold them to the French, the latter would otherwise proceed to absorb Morocco. The Conference had, indeed, been suggested by Germany, to whom Mulai Abd-el-Aziz had appealed in his dilemma, as the only Power which refused to recognize the claim of France to a prescriptive right to reorganize Morocco. Realizing this, France and her allies would only consent to representation at the Conference after a distinct understanding had been arrived

Reason for the Conference.

at with her neighbor as to the matters to be discussed or avoided. It was also felt that Tangier was not a suitable spot for the meetings, so the invitation of Spain to Algeciras was accepted.

Thus it came about that after lengthy consideration the landing-place of the Moors in Spain on their three successive invasions became the scene of what promised to decide the fate of their Empire. The modern town dating only from 1750, has but one attraction, a magnificent English hotel, built by the owners of the picturesque railway which connects it with the rest of Europe, and of the corresponding steamer service across the bay to Gibraltar, placing it in touch with all the world. But this attraction sufficed, and the Reina Cristina Hotel was engaged for the delegates, while the town-hall was cleared and refitted for their deliberations. Moreover, the town was whitewashed, the paving repaired, and much of the grass removed from the streets, while the railway company, which had already built an esplanade, linked it up with the town by a bridge and relaid its jetty.

The town of Algeciras.

In addition to the accommodation at the hotel, the Moorish and British delegates, and the numerous suites of those of France and Spain, were provided with separate villas. The enormous expense of the Conference may be judged from the fact that Sir Arthur Nicolson and his three assistants were considered

The town prepares for its guests.

to have "got off cheap" at a rental of £10 a day for eighty-four days and "find themselves." A shipload of horses and carriages at £2 10*s.* a day each pair was transported from Seville and accommodated in the bull-ring. With these incidentals must be included the heavy item of travelling expenses, and the volume of telegrams constantly going and coming. If to this outlay be added that of the Press, represented at one time by over eighty correspondents, the total cost of the Conference will be seen to have been enormous. Under the head of telegraphing alone some five million words at least would have to be charged, a large proportion going *viâ* Gibraltar. The French delegation numbered about fourteen and the Spanish about ten; the Moorish eight, the German six, and most of the others four.

Expenses of the Conference.

The meetings were held at irregular intervals, about three times a week, being summoned whenever the President was advised that sufficient instructions had been received, or that the drafting committee had some document to present for consideration. Formal sessions were held from ten to twelve in the morning, the Conference meeting in committee from three to five in the afternoon, the drafting and translating committees assembling when and where convenient to their members. The last named consisted of the interpreters attached to several of the delegations,

and their task was one of the most arduous entailed on any present. It is no slight matter to translate Occidental technical terms into Arabic equivalents which shall be intelligible to Moors unacquainted with the ideas expressed; or to render the subtle phraseology or an Oriental document in exactly equivalent French that shall not be liable to misconstruction.

For lack of precedent to the contrary, the meetings of the Conference were all held *in camerâ,* only the baldest of bald *communiqués* being read by the secretaries in French and Spanish to the assembled correspondents in the central court of the town-hall. The proceedings being considered strictly private, and the documents presented being headed "*très confidentiel,*" all further information imparted by the delegates and others present—some forty persons in all—was regarded as a special favor, in return for which special consideration was expected. At first many found information difficult to obtain, but as newspapers began to arrive containing statements and even documents telegraphed before they had been presented to the Conference, all reserve soon broke down, and each correspondent at once made for the man he found most willing to communicate the facts to him. The only systematized dissemination of information was arranged by the French, who had brought with them the most amiable gentle-

The newspaper correspondents.

man whose duty in Paris it is to issue similar *communiqués* to the Press from the Quai d'Orsay.

Had it been possible to shut the delegates up at Algeciras, with all wires cut, till they had arrived at a unanimous agreement subject to the ratification of their respective Governments, there is little doubt that a month would have seen the end of their labors, which it is quite unlikely that either of the Powers represented would have ventured to upset by refusing to accept the result. As it was, however, the deliberations were seriously hampered by the constant receipt of instructions from the various Foreign offices, which transferred to them the real game, while at the so-called "Conference" the ostensible players were reduced to the condition of mere puppets on the board. It is true that endless *pourparlers* took place, every conceivable alternative of each phase being informally discussed *ad nauseam* between the jaded delegates, whose real task was this unending talk, not the brief times spent in meeting.

Endless *pourparlers.*

In the absence of results, or even of decided progress, these *pourparlers* afforded unlimited scope for the busy journalist, as there was no scheme too wild to have been talked over in some mood by one delegate or another, probably much more readable and exciting than anything which received serious consideration. Thus, when even these lacked in the

tedium of protracted negotiations, it was always safe to report a deadlock, touched up each time with some fresh phase of gravity in the situation, or enlivened by some out-and-out *canard,* of which the wires were prolific. Directly there were signs of approaching action the public was let down gently by premonitory telegrams that things were calmer, or the atmosphere was clearing; never of course shocked by the fact that all the excitement was fabricated.

Canards circulated.

Meanwhile, in the streets and hotels of Algeciras the same scratch crowd of diplomatists and journalists kept on meeting and wearisomely discussing threadbare topics, varied by an interchange or more or less humorous local jokes regarding this or that eccentricity, or the latest *canard* from Paris or Berlin. The reading-room of the hotel was crowded after lunch and dinner with the familiar figures, and heroic attempts were made to attach importance to the well-worn platitudes exchanged. On their arrival Algeciras had received its visitors with open arms and fancy prices. There had been a reception, a ball, a picnic, and bull-baiting, but welcome was now wearing out; and as matters dragged on, and correspondents dwindled or moved into rooms, leaving hotels half empty, things grew dull and wearisome.

Among the delegates there had throughout been an earnest and a combined desire to ar-

rive at a settlement, but the optimism of most gave way at last: the Marquis Visconti-Venosta and Mr. White, representing respectively Italy and the United States, alone remained consistently optimistic. Among the journalists, however, most were pessimistic all along, and some frankly regarding the whole thing as a farce, were anxious only to see the Conference break up and France and Germany at one another's throats. When at one time it did seem likely that such counsels would prevail, the writer submitted the following message before despatch to delegates of seven of the Powers not immediately concerned—Austria, Belgium, Holland, Italy, Russia, Spain, and the United States—by all of whom it was endorsed as an expression of their opinion:

Optimism of the delegates from the United States and Italy.

"Few realize the absolute danger to foreign life and property in Morocco that the failure of the Conference to solve the European problem would involve.

"Should France persist in maintaining all her demands for preponderating influence, and Germany as determinately continue to insist on absolute equality for all, the failure of the Conference cannot be averted and foreign interests in Morocco will be in a worse position than ever.

Duel between France and Germany the chief issue.

"Is it not the duty, then, of England and Spain, as allies of France to do their utmost to induce her to abate her demands; and equally the duty of the Powers allied with

Germany to induce her to recognize that France has certain interests which give her certain rights in Morocco? The French Press and people cannot be aware what they are courting in Morocco by their clamor for firmness on the part of their Government, to say nothing of the bloodshed in Europe to which it may lead."

Fallières elected President of France.

[The Algeciras Conference reaches an agreement in June, accepted by the Sultan, whereby the question of policing the Moroccan ports by Spain and France is disposed of—the duration of the agreement to be for five years. Fallières elected President of France. Capture of Quito ends Ecuador revolution. Socialist demonstrations in Russia. Brazilian warship *Aquidaban* sunk by powder mine explosion near Rio de Janeiro (223 killed, including 3 rear-admirals). First passenger train passes through the Simplon tunnel. Lord Cromer opens new railway from the Nile to the Red Sea. Christian IX. of Denmark dies and is succeeded by Frederick VII. Jewish International Conference opens in Brussels to consider the state of the Jews in Russia. Earthquake and tidal wave on coasts of Colombia and Ecuador. Church riots in France. Cyclone devastates Society Islands. British battleship *Dreadnought,* largest in the world, launched in Portsmouth.]

DREADNOUGHTS

(A.D. 1906)

NAVALIS

WHEN his Majesty the King launched the *Dreadnought,* in February, 1906, the attention of his subjects was irresistibly drawn to their first line of defence. For weeks beforehand the event had been eagerly canvassed in the newspapers; rumor was busy with regard to the new leviathan; her size, her armament, her rapidity in building, her supposed secrets of construction attracted and held popular interest. Enthusiasts prophesied, and the public dimly felt that the latest battleship would mark the beginning of a new epoch in naval history. The launching of the *Dreadnought* was hailed as a revolution in the art of building warships which would render the navies of the world obsolete.

Launch of the *Dreadnought.*

Our Admiralty prided itself on having been the first to appreciate the lessons of the Russo-Japanese war, and to apply in a scientific and practical spirit the knowledge supplied by the terrific naval encounter which swept the Baltic fleet from the seas. If the lessons of that memorable carnage could be epitomized

Lessons learned from the Japanese war.

Efficacy of heavy guns.

in one word, it would be the supreme efficiency of heavy guns. The small guns (viz., all below an eight-inch calibre) had, it was said, been shown to exert but little influence during a naval action. It was the heavy ten-inch and twelve-inch guns that pulverized the Russian fleet and gave the victory to the Japanese.

Ita scriptum est. The *Dreadnought* accordingly carries such an armament as ship has never carried before. In five large turrets she carries no less than ten twelve-inch guns, marking an advance actually of six twelve-inch guns on the armament of the *King Edward VII.*, previously our heaviest armed battleship. The former secondary batteries of six-inch guns found no place in the *Dreadnought.* The war was supposed to have sealed the fate of smaller guns. Curiously enough, the Japanese themselves derived no such ideas from the teaching of the war. Their experience of the heavy guns in action told against, rather than in favor of, the *Dreadnought* design. They attributed much of their success to the accurate and comparatively rapid fire of the secondary batteries of six-inch guns carried by their battleships. After learning all that the war could teach them, they built new ships all carrying secondary batteries. It appears, therefore, that Dreadnoughts armed with big guns only are by no means the result of what war teaches. If the lessons of

the last naval war be carefully studied, the importance of secondary batteries will be emphasized. A cursory glance into the past history of shipbuilding will show that the new-fashioned craze for Dreadnoughts is merely a recrudescence of the "heavy-gun" cry which agitated the seventies. It is the old rivalry of weight with mobility and speed.

In the Napoleonic wars the 74-gun ship was found more serviceable than the 100- or 120-gun ship, partly on account of being more easily handled, partly because the crew was smaller and the ship could be kept at sea more economically. In the seventies a feeling in favor of "all-big-gun" ships arose. The *Devastation* carrying 35-ton guns, the *Thunderer* with 35 and 38, the *Dreadnought* with 38-ton guns were soon followed by the *Inflexible* (commissioned in 1881), carrying all 81-ton guns in her armament. The *Agamemnon* and *Ajax* came next with 38-ton guns only. The want of a secondary battery of smaller guns was now felt, and the *Edinburgh* and *Colossus* which followed carried, in addition to their twelve-inch 43-ton guns in turrets, a few six-inch guns. Next the *Collingwood,* besides her twelve-inch guns, was equipped with a regular secondary battery of five-inch guns. The *Howe, Rodney,* and all the class known as the "Admiral" class were fitted with six-inch batteries. The ill-fated *Victoria* and the *Sanspareil* carried each one

The "Admiral" Class.

ten-inch and a six-inch battery besides the 110-ton guns in the turret. Then came Sir William White's battleships of the Royal Sovereign class, all armed with powerful six-inch batteries in addition to the four 13.5-inch guns which they carried in barbettes. This system prevailed until the King Edward class was introduced, carrying four twelve-inch guns in two turrets, four 9.2-inch guns in four turrets, and a powerful battery of six-inch guns. The King Edward class was succeeded by the *Lord Nelson* and *Agamemnon,* but although these ships were designed and laid down before the *Dreadnought,* the latter was pushed forward, and was actually completed and at sea before the *Lord Nelson* and *Agamemnon.*

The King Edward class.

Now the Dreadnoughts are repeating the history of the seventies, carrying only big guns, but they carry many more of them. The old *Dreadnought* carried four 38-ton 12.5-inch guns in two turrets, but the new *Dreadnought* carries ten 60-ton 12-inch guns in five turrets, while the latest Dreadnought of the St. Vincent class will carry 12-inch guns weighing 67 tons. These Dreadnoughts are necessarily very large ships, displacing double the tonnage displaced by the old *Dreadnought.* They have turbine engines, and can steam 21 knots as compared with the 18 knots of the King Edward class. Therefore, apart from their armament, they are much larger ships, and

The new Dreadnoughts.

would take much more punishment; they are also better protected by armor, and are very much faster ships.

The Russo-Japanese war was the occasion, but not altogether the cause, of building Dreadnoughts. No doubt naval battles will have to be fought at such long ranges in future that big guns will show to greater advantage. This is due to the increased range of torpedoes, but the design of the *Dreadnought* cannot be attributed to this cause, because the new long-range torpedoes are of later date than the great battleship. Probably the chief reason is to be found in studying the marvelous development of naval gunnery during the last few years.

Increased range of torpedoes.

In the seventies and even the eighties, quarterly practice from heavy guns was a thing to be got through as quickly and with as little trouble as possible. It formed a break in the routine of a man-of-war, and, although necessary, was regarded as somewhat of a nuisance. Masts and yards and sails, whilst they existed, were a much more popular form of exercise than was gun practice, and, undoubtedly the latter gave way on every occasion to the former. But mast and sail drill disappeared, and a new type of naval officer sprang up who saw the true importance of gunnery, and gave all their energies to its furtherance. By encouraging their men, and by instituting competitions and drill of a stimulating nature,

Standard of firing raised.

the standard of firing was soon raised beyond all expectation. The quarterly firing as it used to be gave way to keen competitions amongst ships and fleets, and officers strained every nerve to bring their ships to the front. The Admiralty backed up their endeavors to the utmost, promoting and rewarding officers whose ships had gained distinction, and shelving others whose firing was not up to the mark. It was soon found that drill and exercise had a limit, and further improvement had to be sought in the direction of improved appliances. Sights were naturally first developed, telescopes being introduced, and various complicated and delicate scales devised to make allowance for as many as possible of the variations which the gunner must look for.

The next and most important step came in the direction of "fire-control," this being an elaborate and complicated system by which the guns of a ship are fired under the control of an officer highly trained for the purpose. The greater the number of guns of different varieties on board, the more complex became the fire-control, and the greater the probability of mistake. It will be seen at once that the way was paved for an armament of one calibre only, such as is carried by the new Dreadnoughts.

The question as to which is most likely to disable an enemy—a limited number (say ten) of twelve-inch guns; or a large number of

smaller guns coupled with only four twelve-inch guns, with, perhaps (as in the King Edwards), four 9.2-inch guns, assuming that fire-control could be used to equal advantage in both classes of ship—is quite an open one, on which there is much divergence of opinion. It is true that a six-inch gun can only fire a shot weighing 100 lbs., whilst a twelve-inch gun discharges an 850-lb. shot; but it must not be forgotten that the six-inch gun will fire about eight rounds, whilst the twelve-inch will fire two rounds. Two six-inch guns will therefore fire in a given time nearly as much weight of shell as one twelve-inch, and the two six-inch guns can be carried for about one-seventh the weight of the one twelve-inch. It seems difficult to reject the conclusion that for a given weight a battery of fourteen six-inch guns, capable of firing 11,200 lbs. of shell per minute, must be more formidable than a single twelve-inch capable of firing only 1,700 lbs. of shell in one minute. Fire-control.

But demoralizing as a rapid fire of six-inch shell is to an enemy, there can be no comparison between the destructive force of these and that of the large shell discharged from the twelve-inch guns. None save those who have seen it can form an idea of the frightful havoc caused by an 850-lb. shell. Imagination boggles at the plight of an enemy having twenty of these terrible shells bursting on board his ship per minute. If every shot struck home

there is not a battleship afloat that could survive such an ordeal even for one minute.

The right conclusion seems to be that the Dreadnoughts possess a greater advantage from being able better to control their fire. Hits only count in war-time, and the best directed fire must give the victory. The Dreadnoughts also carry enough twelve-inch guns to enable them to keep up a practically incessant fire. Eight guns in a broadside action, each firing two rounds a minute, would certainly appear incessant to an enemy if the shot struck home, and if the theory that ten hits are enough for the ordinary ship, a Dreadnought soon ought to be able to silence a King Edward. Moreover, the Dreadnought being so much larger and better protected would probably stand much more than the suggested ten hits and hence derive another advantage.

The King Edwards, Lord Nelsons, and even the Royal Sovereigns are still formidable ships, and could render an excellent account of themselves. It will be many years before an enemy's fleet will be composed only of Dreadnoughts, and therefore our older ships will be able to find opponents with whom they are evenly matched. Between two fleets, however, of equal numbers and equally well drilled—one of Dreadnoughts and the other of King Edwards—victory should declare in favor of the Dreadnoughts.

Dreadnoughts supposed to be more efficient than King Edwards.

[Martial law proclaimed in Natal. Hungarian Parliament dissolved by royal commission. Mikado invested with the Order of the Garter by Prince Arthur of Connaught. Senate passes amended Pure Food Bill. German Reichstag passes bill to extend reciprocal tariff rates to the United States. Chinese mob at Nanchang massacre English missionaries and burn American mission property. Mob at Springfield, Ohio, attack negro quarters. Dr. Alfonso Moreira elected President of Brazil. Tornado devastates Meridian, Miss. (20 killed; $1,200,000 losses). Russian Government institutes new national parliament. Father Gapon arrested in St. Petersburg. Two passenger trains collide in Adobe, Col. (22 killed). Earthquake in Formosa (thousands perish). Avalanches in Colorado (16 perish). German colony in S. W. Africa destroyed by the Hereros. Conflagration at Sydney, N. S. Wales (£150,000 losses). Text of British Government's Education bill published. Vesuvius in eruption.]

Dr. Alfonso Moreira elected President of Brazil.

THE ERUPTION OF VESUVIUS

(A.D. 1906)

ROBERT HAVEN SCHAUFFLER

VESUVIUS is sixteen miles away, and all the doors and windows are closed; yet a fine red dust falls constantly and dims the words I write. Outside the balmy, bright Italian spring is buried in ashes and lava and gloom. The gay streets of Naples have lost all their exuberance. Even at this distance from the volcano there is little but anxiety, stolid grief, hysteria, exhaustion, and dazed terror. But as one approaches the region of the worst disaster, one understands why most of the fugitives who swarm these streets are dumb, and apparently apathetic. The horror of the thing is too portentous, and tongue and pen are seized by a paralysis of pity and awe.

A rain of red dust.

The Italian and English papers have been filled with the most fantastic, extravagant, and conflicting reports, so that in verifying my observations I have depended rather on the verbal accounts of eye-witnesses. I am especially indebted to the kindness of Signor Bassani, the professor of geology in the University of Naples. Professor Bassani is the master of

Professor Matteucci, the hero of the hour, who in spite of everything has stuck to his post in the Vesuvian Observatory during this terrible week.

Up to the present time over two hundred lives have been lost, half a dozen towns have been partially destroyed, many thousands have been reduced to beggary in a stroke, and fair Italy has been girdled from sea to sea with a deep broad belt of ashes. These ashes contain silicates of alumina, potash, and soda, which will destroy the crops, although the land will regain its fertility in two or three years. The trees are all plastered with mud, which without a heavy rain will soon kill the leaves. And the grandest landmark of the most beautiful bay in the world has been disfigured. For so much of the cone of Vesuvius has fallen in that it now stands two hundred metres below the twin peaks of Somma, which it formerly overtopped by one hundred metres. It is as though an exceedingly handsome man should be scalped and deprived of his front teeth.

Vesuvius disfigured.

Vesuvius began to show unusual activity about the first of the year, and in February Cook's funicular railway was broken by a flow of lava. It was delightful as one walked along the Carracciolo on a soft February evening to look across the bay to the two glowing lava streams trickling down from the crater. We took an unalloyed esthetic pleasure in the sight then, for the sinister signifi-

cance of that glorious red did not impress itself on us until the morning of April 5, when a new crater was opened up east of the terminal station of the funicular railway and began spitting fine ashes over Naples, while a great stream of lava descended, threatening Boscotrecase, a little town of five thousand or six thousand inhabitants midway between Pompeii and Herculaneum.

A new crater appears.

On the following morning a second crater opened above the town in the path of the stream, and then the dark curtain was lifted upon the first act of the drama proper. The lava began its final advance on the doomed town. By six o'clock on the evening of April 7 the stream passed between the cemetery and the oratory, and half of Naples was there to see what it would do. It was a brilliant spectacle, and in its comparative harmlessness modulated mercifully toward the grimmer acts to come. The inhabitants, with touching faith and simplicity, carried the image of St. Anna in solemn procession from their church to stay the advance of the lava. It was to them a contest between the powers of heaven and of hell, and not until the first house had melted away did they lose their calm and almost cheerful faith that the good St. Anna would be as potent against the infernal river as is the holy Agatha, the protectress of Catania, when Etna rages. As a climax the great cone of Vesuvius fell in at 1:15 on Sunday morning,

The first act of the drama.

VESUVIUS IN ERUPTION

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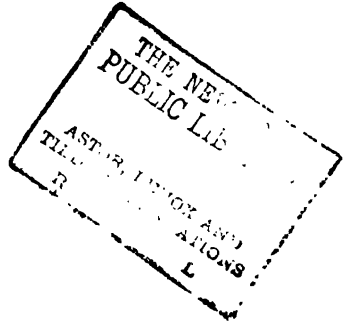
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with a shock which created a panic in Naples itself, and a huge tree of flame three times as high as the volcano, shot up to light the scene. According to Professor Bassani the quantities of lava which had issued from the new craters had undermined the cone and caused its collapse. The lava came on in a stream five metres high and from forty to three hundred metres wide. On reaching the town it split and encircled it, entering from either side. The work of destruction was leisurely, as the stream flowed no faster than seventy metres an hour. It would sullenly encircle a house, burn all the woodwork, and finally, by its own tremendous weight, push it into a crumbling heap. It would rush into a well with a sharp report and shoot a geyser of water thirty metres high over the bystanders. With a grim irony one of the streams took its way into the very church of the futile St. Anna herself. The Duke and Duchess of Aosta, with their characteristic kindness and ubiquity, were there bringing comfort and courage to the miserable *contadini,* who half worshiped them with a touching devotion. After destroying about one-fourth of the town without loss of life, the streams met and flowed down toward the city of Torre dell' Annunziata, wrecking the beautiful Villa Mango, and stopping just outside of the cemetery to the northeast of the city.

Streams of lava.

Few slept in Naples on that memorable

The earthquake.

night. 'The earthquake kept the terrified population in the streets. They rushed half-dressed into the squares and fell on their knees praying and singing frantically. The city swarmed with refugees from the slopes of Vesuvius, many of whom congregated in the Piazza di Municipio begging for help from the Neapolitan authorities, who responded promptly and generously. In the villages especially to the north and east of the volcano, earthquakes destroyed many buildings on Sunday, and on Monday morning the overwhelming rain of ashes changed in San Giuseppe, Ottaiano, Terzigno, and Somma into a hail of cinders which turned little by little into gravel, then pebbles, then stones as large as goose eggs, which crashed through roof and floor. The wretched people sought refuge in the churches only to be buried under crumbling masonry. The real way to safety lay in flight, and great numbers escaped by holding chairs and tables over their heads as they toiled along the heavy roads. Babes were struck from their mothers' arms. Husbands were forced to leave their mutilated wives by the roadside. Many a gallant deed was done that day. Many a son carried his aged parent Anchises-like from that terrible place. It is estimated that the loss of life in this region on Monday was over two hundred. In San Giuseppe alone one hundred and twenty were killed.

In Naples and its environs the fall of ashes on Sunday night was changed by the steam from the great new crater into a fall of heavy mud. The blue bay on Monday morning looked like the Ohio river, and the trees were plastered a hideous dark brown.

In the forenoon I made my way to Torre dell' Annunziata with great difficulty in a cab. The road was full of fugitives who constantly implored me to turn back, saying that sure death was just ahead. At San Giovanni I met a procession of boys and girls carrying a cross and a blackened statue of the Madonna back to the Church of the Carmelites in Naples. At times the rain of ashes became so thick that one could breathe only with the greatest difficulty, and photography was almost out of the question. But in spite of their troubles the people were courteous to each other, and I heard no word of complaint on the whole route. Even their usual buoyancy was not wholly gone, and there was always a laugh when any one was hit by the mud which was being shoveled from the housetops into the street. The boys at least forgot their troubles for the moment in mud ball fights. But all at once terror reigned everywhere, for near the entrance to the Herculaneum excavations the fall of ashes abruptly doubled its intensity, and it grew so dark that I could not see my hand before my face. In five minutes the light returned as suddenly as it had gone, and

The fugitives.

with some difficulty I persuaded my driver to go ahead. Soon we met a pitiful procession; the women with loosened hair, the men staggering under the weight of five wooden statues from a church in Portici. The women were singing hysterically and beating their breasts. They reminded me of Virgil's excitable Trojan ladies, *crinibus passis,* with their Lares and their Penates. At Torre dell' Annunziata, which was imminently threatened by the lava, the light suddenly failed us again. The ashes changed to hail. Vesuvius spat, snarled, growled above our heads, while driver, horse, and I sought refuge in a palace portico where four men were crouching over some embers. Their faces showed white underneath the dirt, their teeth chattered, their lips trembled, and their voices were faint with fear. They mumbled that this was the "day of judgment," "the castigation of the Almighty," and then whispered apart among themselves. Happily my driver had quick ears. He overheard some of their words and twitched my sleeve, telling me in a scared voice to come quickly and say nothing. Then we bolted for Naples, while he explained that those men had been planning to disable us and escape in our cab from "judgment." Nothing could prevail on him to take me back.

Suffering of refugees.

On our return trip we took with us as many refugees as possible. There was one aged couple who had come out from Naples to

visit for the last time before the end of the world the grave of a parent at Portici. Both were immensely large, and feeble to the verge of collapse, but both had done their pious duty and were now cheerfully ready to "let come what come may." A young fellow from Torre del Greco climbed in and told us that he had lost his family in the panic, and that the thieves had stolen everything they possessed in the world. In his opinion the thieves were worse than the ashes and the lava combined. Later in the day the King and Queen of Italy, with the courage characteristic of the reigning house, visited Torre dell' Annunziata for a few minutes, bringing new heart to the inhabitants. They returned to Rome immediately, however, without visiting the more stricken regions.

Courage of the King and Queen.

On Monday evening I started with my friend the American Vice-Consul for Ottaiano on wheels, choosing the northern route to avoid the ashes falling south of the volcano. After leaving Ponticelli the road soon became so bad as to put cycling out of the question. The ashes lay three feet deep everywhere. The moon was full in a clear sky and lit most spectacularly the gigantic gray clouds which Vesuvius kept pouring forth. Almost every third building we saw between S. Anastasia and Ottaiano had been damaged either by the earthquake or the rain of rocks. Two churches at Somma were wrecked and we

picked our sad way over the fragments of the campanile which had toppled from the church of Constantinople into the road. This region reminded us most strongly of the last days of Pompeii, for here geology repeated itself. There were three strata like those which covered the Roman city: one of light colored ash, one of black ash, and one of stones. The few inhabitants remaining dared not enter their houses.

The last days of Pompeii repeated.

We came upon them here and there cowering over fires in the open, or sleeping in hastily improvised tents so lightly that the slightest sound brought them out with a rush, or wandering hopelessly through the endless ashes. One old *contadino* in particular touched us to the heart. We had been commiserating with him. "Oh, well," he said, "all that we poor peasants can do is simply to die, and there is an end of it. But the gentleman, the *'padrone,'* finds himself in a yet worse plight. *Ecco"*—he pointed to the buried fields, "his income is cut down. He must retrench. His honor is touched. Ah, *that* is a tragedy, indeed!" My friend told me that such loyalty to the *"padrone"* was common to Neapolitan *contadini.*

At six in the morning, when we had toiled to within a few miles of Ottaiano, the wind began to veer to the northeast and the lowering cloud of ashes and rocks swung slowly, menacingly toward us. We turned inconti-

nently and fled north. The crisis brought out our ingenuity, and after some practise we managed to ride through the vineyards and grain fields by the roadside on the thin crust which had formed toward morning over the ashes. It was like skating on rotten ice. We had to pedal hard while stooping low under the vines; and at the best we broke through about every twenty yards. I suppose it was the first time in history that a wheel had seen such use. But we outdistanced the cloud and arrived in Naples before noon to find that a fresh calamity had just occurred.

A ride over a crust of ashes.

The Mercato di Monteoliveto on the Toledo, the largest market-house in Naples, had suddenly collapsed under the enormous weight of ashes on its roof, killing nine people and wounding one hundred and twenty-five. In consequence the Neapolitans were highly alarmed for the safety of their city, and after packing the Toledo to gaze through the guarded gates at the ruins they rushed away to carry their most potent images in procession through the stifling streets as a preventive of further disaster, and to work themselves into paroxysms of anxiety over the safety of their churches and houses.

Collapse of the market-house in Naples.

This is the eighth day of the eruption, and Professors Bassani and Matteucci declare that the red color of the ash now falling is a sure herald of the end and that all danger is past. The fall, however, is growing constantly

thicker, more buildings are collapsing, the trams and trains are stopping, and the food supply is in a deplorable state. It is feared that another day of ashes may have very serious results for the city.

This week of terror and sadness has raised my estimate of the Italian character, for I have seen how superbly he can rise to an emergency. Among all the wretched fugitives I heard no word of complaint, I saw no cowardly act.

Bravery of the Italians.

[Compromise between Hungarian Parliament and Crown. Anniversary of Declaration of Greek Independence celebrated at Athens. Sixth International Postal Congress held in Rome. Celebration of Franklin bicentenary begun in Philadelphia. San Francisco partly destroyed by an earthquake and Congress appropriates $1,000,000 for relief. Inauguration of Olympic games in Athens.]

THE SAN FRANCISCO DISASTER

(A.D. 1906)

JACK LONDON

THE earthquake shook down in San Francisco hundreds of thousands of dollars' worth of walls and chimneys. But the conflagration that followed burned up hundreds of millions of dollars' worth of property. There is no estimating within hundreds of millions the actual damage wrought. Not in history has a modern imperial city been so completely destroyed. San Francisco is gone. Nothing remains of it but memories and a fringe of dwelling-houses on its outskirts. Its industrial section is wiped out. Its business section is wiped out. Its social and residential section is wiped out. The factories and warehouses, the great stores and newspaper buildings, the hotels and the palaces of the nabobs, are all gone. Remains only the fringe of dwelling-houses on the outskirts of what was once San Francisco.

San Francisco annihilated.

Within an hour after the earthquake shock the smoke of San Francisco's burning was a lurid tower visible a hundred miles away. And for three days and nights this lurid tower swayed in the sky, reddening the sun,

A three days' fire.

darkening the day, and filling the land with smoke.

The earthquake.

On Wednesday morning at a quarter past five came the earthquake. A minute later the flames were leaping upward. In a dozen different quarters south of Market Street, in the working-class ghetto, and in the factories, fires started. There was no opposing the flames. There was no organization, no communication. All the cunning adjustments of a twentieth century city had been smashed by the earthquake. The streets were humped into ridges and depressions, and piled with the *débris* of fallen walls. The steel rails were twisted into perpendicular and horizontal angles. The telephone and telegraph systems were disrupted. And the great water-mains had burst. All the shrewd contrivances and safeguards of man had been thrown out of gear by thirty seconds' twitching of the earth-crust.

By Wednesday afternoon, inside of twelve hours, half the heart of the city was gone. At that time I watched the vast conflagration from out on the bay. It was dead calm. Not a flicker of wind stirred. Yet from every side wind was pouring in upon the city. East, west, north, and south, strong winds were blowing upon the doomed city. The heated air rising made an enormous suck. Thus did the fire of itself build its own colossal chimney through the atmosphere. Day and night

this dead calm continued, and yet, near to the flames, the wind was often half a gale, so mighty was the suck. The heated air creates a furious wind.

The edict which prevented chaos was the following proclamation by Mayor E. E. Schmitz:

"The Federal Troops, the members of the Regular Police Force, and all Special Police Officers have been authorized to KILL any and all persons found engaged in looting or in the commission of any other crime. The Mayor's proclamation.

"I have directed all the Gas and Electric Lighting Companies not to turn on Gas or Electricity until I order them to do so; you may therefore expect the city to remain in darkness for an indefinite time.

"I request all citizens to remain at home from darkness until daylight of every night until order is restored.

"I Warn all citizens of the danger of fire from damaged or destroyed chimneys, broken or leaking gas pipes or fixtures, or any like cause."

Wednesday night saw the destruction of the very heart of the city. Dynamite was lavishly used, and many of San Francisco's proudest structures were crumbled by man himself into ruins, but there was no withstanding the onrush of the flames. Time and again successful stands were made by the fire-fighters, and Dynamite used.

every time the flames flanked around on either side, or came up from the rear, and turned to defeat the hard-won victory.

An enumeration of the buildings destroyed would be a directory of San Francisco. An enumeration of the buildings undestroyed would be a line and several addresses. An enumeration of the deeds of heroism would stock a library and bankrupt the Carnegie medal fund. An enumeration of the dead—will never be made. All vestiges of them were destroyed by the flames. The number of the victims of the earthquake will never be known.

Terrible loss of life.

South of Market Street, where the loss of life was particularly heavy, was the first to catch fire.

Remarkable as it may seem, Wednesday night, while the whole city crashed and roared into ruin, was a quiet night. There were no crowds. There was no shouting and yelling.

Calmness of the citizens.

There was no hysteria, no disorder. I passed Wednesday night in the part of the advancing flames, and in all those terrible hours I saw not one woman who wept, not one man who was excited, not one person who was in the slightest degree panic-stricken.

Before the flames, throughout the night, fled tens of thousands of homeless ones. Some were wrapped in blankets. Others carried bundles of bedding and dear household treasures. Sometimes a whole family was harnessed to a carriage or delivery wagon that

was weighted down with their possessions. Baby buggies, toy wagons, and go-carts were used as trucks, while every other person was dragging a trunk. Yet everybody was gracious. The most perfect courtesy obtained. Never in all San Francisco's history were her people so kind and courteous as on this night of terror.

Behavior of the victims.

All night these tens of thousands fled before the flames. Many of them, the poor people from the labor ghetto, had fled all day as well. They had left their homes burdened with possessions. Now and again they lightened up, flinging out upon the street clothing and treasures they had dragged for miles.

They held on longest to their trunks, and over these trunks many a strong man broke his heart that night. The hills of San Francisco are steep, and up these hills, mile after mile, were the trunks dragged. Everywhere were trunks, with across them lying their exhausted owners, men and women. Before the march of the flames were flung picket lines of soldiers. And a block at a time, as the flames advanced, these pickets retreated. One of their tasks was to keep the trunk-pullers moving. The exhausted creatures, stirred on by the menace of bayonets, would arise and struggle up the steep pavements, pausing from weakness every five or ten feet.

The fugitives.

Often, after surmounting a heart-breaking hill, they would find another wall of flame ad-

vancing upon them at right angles and be compelled to change anew the line of their retreat. In the end, completely played out, after toiling for a dozen hours like giants, thousands of them were compelled to abandon their trunks. Here the shopkeepers and soft members of the middle class were at a disadvantage. But the working-men dug holes in vacant lots and backyards and buried their trunks.

At nine o'clock Wednesday evening I walked down through the very heart of the city. I walked through miles and miles of magnificent buildings and towering sky-scrapers. Here was no fire. All was in perfect order. The police patrolled the streets. Every building had its watchman at the door. And yet it was doomed, all of it. There was no water. The dynamite was giving out. And at right angles two different conflagrations were sweeping down upon it.

A doomed district.

At one o'clock in the morning I walked down through the same section. Everything still stood intact. There was no fire. And yet there was a change. A rain of ashes was falling. The watchmen at the doors were gone. The police had been withdrawn. There were no firemen, no fire-engines, no men fighting with dynamite. The district had been absolutely abandoned. I stood at the corner of Kearney and Market, in the very innermost heart of San Francisco. Kearney Street was

In the heart of San Francisco.

deserted. Half a dozen blocks away it was burning on both sides. The street was a wall of flame. And against this wall of flame, silhouetted sharply, were two United States cavalrymen sitting their horses, calmly watching. That was all. Not another person was in sight. In the intact heart of the city two troopers sat their horses and watched.

Surrender was complete. There was no water. The sewers had long since been pumped dry. There was no dynamite. Another fire had broken out further uptown, and now from three sides conflagrations were sweeping down. The fourth side had been burned earlier in the day. In that direction stood the tottering walls of the Examiner building, the burned-out Call building, the smoldering ruins of the Grand Hotel, and the gutted, devastated, dynamited Palace Hotel.

The following will illustrate the sweep of the flames and the inability of men to calculate their spread. At eight o'clock Wednesday evening I passed through Union Square. It was packed with refugees. Thousands of them had gone to bed on the grass. Government tents had been set up, supper was being cooked, and the refugees were lining up for free meals.

The sweep of the flames.

At half-past one in the morning three sides of Union Square were in flames. The fourth side, where stood the great St. Francis Hotel,

was still holding out. An hour later, ignited from top and sides, the St. Francis was flaming heavenward. Union Square, heaped high with mountains of trunks, was deserted. Troops, refugees, and all had retreated.

It was at Union Square that I saw a man offering a thousand dollars for a team of horses. He was in charge of a truck piled high with trunks from some hotel. It had been hauled here into what was considered safety, and the horses had been taken out. The flames were on three sides of the Square, and there were no horses.

Also, at this time, standing beside the truck, I urged a man to seek safety in flight. He was all but hemmed in by several conflagrations. He was an old man and he was on crutches. Said he: "To-day is my birthday. Last night I was worth thirty thousand dollars. I bought five bottles of wine, some delicate fish, and other things for my birthday dinner. I have had no dinner, and all I own are these crutches."

I convinced him of his danger and started him limping on his way. An hour later, from a distance, I saw the truck-load of trunks burning merrily in the middle of the street.

Twenty-four hours after the earthquake.

On Thursday morning, at a quarter past five, just twenty-four hours after the earthquake, I sat on the steps of a small residence on Nob Hill. With me sat Japanese, Italians, Chinese, and negroes—a bit of the cosmopolitan

flotsam of the wreck of the city. All about were the palaces of the nabob pioneers of Forty-nine. To the east and south, at right angles, were advancing two mighty walls of flame.

I went inside with the owner of the house on the steps of which I sat. He was cool and cheerful and hospitable. "Yesterday morning," he said, "I was worth six hundred thousand dollars. This morning this house is all I have left. It will go in fifteen minutes. He pointed to a large cabinet. "That is my wife's collection of china. This rug upon which we stand is a present. It cost fifteen hundred dollars. Try that piano. Listen to its tone. There are few like it. There are no horses. The flames will be here in fifteen minutes."

Outside, the old Mark Hopkins residence, a palace, was just catching fire. The troops were falling back and driving the refugees before them. From every side came the roaring of flames, the crashing of walls, and the detonations of dynamite.

Refugees driven out by troops.

I passed out of the house. Day was trying to dawn through the smoke-pall. A sickly light was creeping over the face of things. Once only the sun broke through the smoke-pall, blood-red, and showing quarter its usual size. The smoke-pall itself, viewed from beneath, was a rose color that pulsed and fluttered with lavender shades. Then it turned to mauve and yellow and dun. There was

The dawn of the second day.

no sun. And so dawned the second day on stricken San Francisco.

An hour later I was creeping past the shattered dome of the City Hall. Than it there was no better exhibit of the destructive force of the earthquake. Most of the stones had been shaken from the great dome, leaving standing the naked framework of steel. Market Street was piled high with the wreckage, and across the wreckage lay the overthrown pillars of the City Hall shattered into short crosswise sections.

This section of the city, with the exception of the Mint and the Post-Office, was already a waste of smoking ruins. Here and there through the smoke, creeping warily under the shadows of tottering walls, emerged occasional men and women. It was like the meeting of the handful of survivors after the day of the end of the world.

On Mission Street lay a dozen steers, in a neat row stretching across the street, just as they had been struck down by the flying ruins of the earthquake. The fire had passed through afterward and roasted them. The human dead had been carried away before the fire came. At another place on Mission Street I saw a milk wagon. A steel telegraph pole had smashed down sheer through the driver's seat and crushed the front wheels. The milk cans lay scattered around.

All day Thursday and all Thursday night,

all day Friday and Friday night, the flames still raged.

Friday night saw the flames finally conquered though not until Russian Hill and Telegraph Hill had been swept and three-quarters of a mile of wharves and docks had been licked up.

Fighting the fire

The great stand of the fire-fighters was made Thursday night on Van Ness Avenue. Had they failed here, the comparatively few remaining houses of the city would have been swept.

Here were the magnificent residences of the second generation of San Francisco nabobs, and these, in a solid zone, were dynamited down across the path of the fire. Here and there the flames leaped the zone, but these fires were beaten out, principally by the use of wet blankets and rugs.

San Francisco, at the present time, is like the crater of a volcano, around which are camped tens of thousands of refugees. At the Presidio alone are at least twenty thousand. All the surrounding cities and towns are jammed with the homeless ones, where they are being cared for by the relief committees. The refugees were carried free by the railroads to any point they wished to go, and it is estimated that over one hundred thousand people have left the peninsula on which San Francisco stood. The Government has the situation in hand and thanks to the immediate

relief given by the whole United States, there is not the slightest possibility of a famine. The bankers and business men have already set about making preparations to rebuild San Francisco.

Plans to rebuild San Francisco.

WHY I REVIVED THE OLYMPIC GAMES

(A.D. 1906)

PIERRE DE COUBERTIN

IF in reviving the Olympic Games I had merely sought to restore one of the noblest and most interesting of ancient institutions, I do not think I should have needed excuse, for such an ambition would certainly have been both comprehensible and legitimate. It might, however, have been reasonably characterized as a fanciful and superfluous undertaking. There is so much necessary work to be done to supply the myriad needs of our day that we ought not to waste ourselves in unnecessary effort. I have in mind a saying of the great Dr. Arnold about the cultivation of some rare plants. "How interesting," he said, "to give oneself up to this if only one's life could be twice as long as it really is!"

Reason for revival of the Olympic games.

But the Olympic Games are in no way comparable to the cultivation of rare plants. It is my profound conviction that they are one of the corner-stones of progress and health for the youth of our day. Certainly there have been abuses, particularly in England and the United States, and it is always right to combat abuses; but this does not affect the value

Progress and health.

of the fundamental principle underlying the practice of athletic sports—that there is nothing else upon which young men can employ their strength in their hours of recreation and liberty with such advantage both moral and physical. It is not at the moment when the whole civilized world from Petersburg to Madrid and from Tokio to Punta Arenas is adopting Anglo-Saxon ideas on this point that Anglo-Saxons themselves are likely to renounce them.

World-wide interest in athletics.

Well, then, the athletic life of modern youth demands the revival of the Olympic Games; and in that conviction I called for their revival, thinking not merely of France or England, Greece or Italy, but of humanity in general. But, I may be asked what difference do you make between the Olympic Games and what are now-a-days called world-championships? Were the games of antiquity anything else than our competitions for world championships, on their own lines, and taking into account the then meaning of the word "world"? I do not deny that, and I agree that world-championships do form part of the Olympic Games; nevertheless the Olympic Games *are* "something else" as well, and it is just this "something else" that matters, as it is not to be found in any other variety of athletic competition.

For centuries athleticism, its home in Olympia, remained pure and magnificent.

There States and cities met in the persons of their young men, who, imbued with a sense of the moral grandeur of the Games, went to them in a spirit of almost religious reverence. Around them were assembled men of letters and of the arts, ready to celebrate the victories of their energy and muscle; and these incomparable spectacles were also the delight of the populace. No doubt low ambitions and mean passions were present; there is no human assembly without them, no human institution which they do not infest. But despite them the whole result was something grandiose and strong which dominated Hellenic civilization, influencing happily and gloriously the youth of the country and through them the entire nation.

Moral grandeur of the original games.

Such were the Olympic Games of ancient times; such ought to be those of our own day. I perceived clearly the danger run by athleticism in an atmosphere of advertisement and bluff, such as our modern atmosphere is apt to be in a society where effort is generally applied to the quest for material gain, where consequently athletic sports are likely to be commercially exploited by the organizers of public exhibitions. I saw the necessity for re-establishing the Olympic Games as a supreme consecration of the cult of athletics practised in the purest spirit of true sport, proudly, joyfully, and loyally. But to reach a realization of the idea many stages had to

be travelled, and naturally this took time. First of all the new games must be exclusively modern in form; to revive chariot-races, for instance, would only have been to institute a hippodrome devoid of interest for the mass of young men, and to make mere actors of the participants; while, as modern sports are very numerous, an overloaded programme would result. Secondly, the new Games must be international; that is to say the competitors must be the best representatives of civilized nations. In ancient times they were already international in the sense that there was as much difference between the citizens of the various cities of Greece, Italy, and Egypt as there could be now between an Englishman, a Spaniard, and an Italian. These cities readily went to war with one another, and even in times of peace their rivalries were acute. But in our days despite the rapidity and number of means of transport, it is not easy to bring together periodically representatives of all countries, because of the difficulties they encounter in leaving their daily occupations, and in finding, either wholly or in part, the necessary contingent expenses.

A modern programme chosen.

It was done, however, in 1896, 1900, and 1904, not to speak of the Athenian series of games inaugurated in 1906. Anyone who studies the ancient Games will perceive that their deep significance was due to two principal elements: beauty and reverence. If the

Beauty and reverence.

modern Games are to exercise the influence I desire for them they must in their turn show beauty and inspire reverence—a beauty and a reverence infinitely surpassing anything hitherto realized in the most important athletic contests of our day. The grandeur and dignity of processions and attitudes, the impressive splendor of ceremonies, the concurrence of all the arts, popular emotion and generous sentiment, must in all sorts collaborate together. This cannot be achieved by a single Olympiad, nor even by three or four; it will need at least a quarter of a century. But, then, when one aspires to create or re-create institutions of this magnitude, the first condition is not to be in a hurry.

Here again, moreover, we must be resolutely modern. Let us have no clumsy and tactless restitutions. But it is possible to draw inspiration from the past without copying it. To take one example from many: at Olympia the competitors—and it was certainly not one of the least impressive episodes of the Games—assembled before the statue of Jupiter and took solemn oath that they would compete fairly and loyally, swearing also that they were without reproach and worthy to meet their adversaries. Jupiter is no more, and we have lost faith in statues. But I imagine the athletes of the future taking oath before the Games each upon the flag of his own country, and in presence of the flags of

Inspiration drawn from the past.

other lands affirming solemnly that they have always been loyal and honorable in sport, and that it is in a spirit of loyalty and honor they approach the Olympic contests. Would not this provide a scene of dignified beauty fit to inspire actors and spectators alike with the most noble and generous emotions? And similarly, if for vulgar choruses and bands performing selections from operettas we were to substitute an interpretation by great massed choirs of masterpieces by a Handel or a Gluck, should we not be confirming in the completest manner the marriage of Arts and Sports—that is to say of muscular strength and creative imagination, those two poles of human life?

The two poles of human life—art and sport.

In this order of ideals all is yet to be done; but much is prepared in the path of progress. The International Olympic Committee, in summoning in 1906 a conference which met at the Comédie Française in Paris, and discussed the best means for henceforward drawing together Sports, Arts, and Letters, gave the signal for a movement of high importance in this line. Henceforth the scattered efforts of artists can be directed toward a definite aim. Sculptors and musicians have already grasped the possibility of seeking new inspiration in athleticism. At this moment all Brussels is admiring the splendid group *"Lutteurs à Cheval,"* from the chisel of the great Belgian sculptor, Jacques de Lalaing; Paris has been hearing with emotion Augusta Holmès's fine oratorio,

The first conference.

entitled *"Ludus pro Patria";* and the ears of Athenians still ring with the harmonies of the "Olympic Hymn" composed by the Greek musician Samara. Architects have meanwhile, although it is true but timidly, attempted to evolve plans for gymnasiums modelled on antique ideals. When he died, Bartholdi, the celebrated sculptor, left the International Olympic Committee the designs for a *"Monument des Sports,"* which should be one of the finest works of art that the world has seen. On another side, dramatic art is by degrees accustoming itself once more to the open air, and in many different countries performances recalling the theatre of antiquity take place. Finally, in Switzerland the well-known musician Jaques-Dalcroze is striving with admirable zeal to reform choregraphic art, degraded as it has been by the vulgarity and stupidity of our modern dances.

"Monument des Sports."

Thus on all sides individual efforts are ready to converge toward an ideal of general harmony. The arts are drawing together; sound, line, color, and form seem to be preparing to associate once more in movement, which is living beauty, and thus to constitute the spectacular element of the modern Olympiad. With their aid may be framed a worthy setting for the Games—a setting in which shall move athletes well prepared to assist in the great festival, and conscious of the special glory it confers upon them.

[Remains of John Paul Jones interred in Annapolis. Tornado nearly destroys Bellevue, Tex. Ellen Terry celebrates her jubilee in London. International Exhibition in Milan. Labor demonstrations in London and Paris. President Roosevelt attacks the Standard Oil Company. Accident on Pennsylvania Railroad at Clover Creek Junction kills ten. Bomb thrown at Governor-General of Moscow. Governor-General of Kieff assassinated. First Russian Duma meets in St. Petersburg.]

First Russian Duma meets.

THE FIRST RUSSIAN PARLIAMENT*

(A.D. 1906)

A. S. RAPPOPORT

FOR a moment it seemed as if the Duma would never assemble, as if the plan had been abandoned. When will the Duma be convened? was the question. Soon—later—some day—never—were the answers given. But no, the reactionary party was too wise for that. We must combat Liberalism and Democracy with their own weapons. When will the Duma meet?

Let the reader now follow me into the midst of the historical assembly, cast a glance at the motley crowd, and gage the atmosphere of the Tauride Palace. He will soon find that there is a storm in the air, that he is treading on mines, into which the enemy is only too ready to throw the fatal spark.

In the first instance, the Duma can have no deep nor far-reaching influence, as it can hardly be called a truly representative national assembly impersonating the will of the people. The workmen have practically no deputies in the Tauride Palace. On the one hand the majority of workmen and artisans, Limitations of the Duma.

*This article, written at the time of assembling the first Russian Duma, describes the conditions existing at that time.

Workmen and peasants.

who are recruited from among the peasant class, but who work in towns and cities during a certain period of the year, were deprived of the privilege of voting, and took no part in the elections. As workmen, living in the towns, they had forfeited their rights to vote with the peasants, while on account of their mere temporary sojourn in the towns they were not recognized as townsmen, and were thus unable to vote with the latter. Those, on the other hand, who were admitted to vote had to pass through the three-story system, the triple crucible, so that their votes never reached the Duma. Many, again, were either too frightened to record their votes or were simply prevented by the Government from doing so. As regards these, one need only think of the numerous arrests that accompanied the Duma elections. Over 80,000 voters were filling the various State prisons, while the people were electing their representatives for the National Assembly. Wherever a candidate was nominated for election by the workmen, he was speedily arrested under some pretext or other. In many cases the electors, in a spirit of bitter irony, nominated some invalid or cripple, some lame or blind harmless individual whom, they said, the Government would mercifully spare.

Arrest of workmen's candidates.

Many provinces, it must further be borne in mind, have sent no representatives as yet. The elections have not yet taken place. And when

Provinces not represented.

the newly elected members arrive some day on the banks of the Neva, who knows whether they will not find the gates of the Tauride Palace locked or Cossacks barring their way, shouting: *"Tee Kooda?"* (Whither art thou going?). Thus Siberia and the Caucasus, with a population of more than twenty millions, have no representatives in the Duma. The two provinces, with such important centres as Baku and Tiflis, are still in a state of siege and martial law. It was a very wise precaution on the part of the Government to prevent Siberia and the Caucasus from sending delegates to the Duma. Siberia, where thousands and thousands of exiles, intellectuals, and revolutionaries are dwelling, is too much imbued with the spirit of liberalism and hostility to the existing order of things to be trusted. The representatives, arriving from the snow-covered wastes of Siberia, would bring the glacial air of suffering and the fiery spirit of vengeance into the midst of the Duma. There is, also, no one, for the present, to represent the interests of Armenians and other hostile tribes in the Russian Parliament. As far as the peasants are concerned, they can hardly be said to have been electing their members quite freely and in full cognizance of facts. They were compelled by the Zemsky *natshalniks* to vote separately, while all orators attempting to explain matters to the ignorant *muzhik* were quickly silenced. In many

Hostile tribes not represented.

Expulsion of Jews.

of the southwestern provinces Jews, arriving in the villages during the elections, were, without any further inquiry, immediately expelled. Their mere presence became dangerous, since a conversation with them might enlighten the peasant, who at all costs had to be kept in the dark. I will not dwell on the gagging of the press and other restrictive measures. The following figures will, however, give some idea of the rigorous manner in which the restrictions were systematically carried out. During the short period of one month, from December 25, 1905, to January 25, 1906, seventy-eight journals were suspended in seventeen towns, and fifty-eight editors arrested. A state of siege was proclaimed in sixty-two localities and that of extraordinary police supervision in forty-one others.

Repressive measures.

[Russian Correspondence, No. 17, February 17, 1906.] The Duma, one must therefore admit, will have no right to speak in the name of the people, as its authority is not and will not be recognized by a considerable portion of the nation.

From the general aspect of the Duma I will now pass to its constituent elements and to the various social groups that form the present Assembly in the Tauride Palace.

Parties in the Duma.

The first and foremost, by far the most important, compact group in the Duma is that of the Constitutional Democrats, numbering about 200 members. It is from among the

Constitutional Democrats that the President and the bureau were elected. A close analysis, however, of the members belonging to this party will easily convince the observer that even were they animated by the best wishes to act unanimously it will be impossible for them to do so. They have very few interests in common, they belong to different worlds, to different classes of society, they uphold quite different traditions, and are far from being animated by the same aspirations or from cherishing the same ideals. Their *Weltanschauung,* their views, will soon have to be put to the test, and a clash, or fatal conflict, is inevitable. The left wing of this group consists of the so-called *intelligenzia,* lawyers, physicians, teachers, and students. Most of them are radicals, revolutionaries inclined to Nihilism, dreaming of a republican government. Most of them are the members of the Union of Unions. They were the minor Zemstvo-workers. Their personal interests are centred in the towns, they have no land, and are consequently likely to be *intransigeant* on the agrarian question. Side by side with them—for the present at least—sit the progressive, liberal landowners, members of the nobility. They form the right wing of the Constitutional Democratic party.

Radical members.

Education, tradition, surroundings, *milieu,* and environment have tended to produce a different trend of thought in them, more mod-

erate, more conservative, than that of their co-partisans. They are mostly monarchically inclined. Their interests are almost entirely rural, their very existence is closely connected with the land question. Yonder, again, is the group of peasants, of long-bearded and shaggy *muzhiks*. They are all inspired by the same desire, and cherish the same ideals; they will act unanimously, one would think. I doubt it, however. They, too, belong to different schools. Some of them have suffered terribly, in person and property, from the Government; they remember the lashes, the *nagaikas*, the cruelty of *tshinovniks* and bureaucrats, of police and of Cossacks. Theirs is not the gospel of love, but that of hate. It is the gospel of hate and destruction which they will preach; hate against the oppressors, destruction of the existing order of things. "Deliver us from the rule of the Cossacks and of the police," is the sole mandate many of these deputies have received from their electors. Abolition of the present régime—*tabula rasa*—is their sole program; and, in the circumstances, it is, perhaps, the wisest program, too.

Lack of effective unity.

The gospel of hate.

[Vice-Admiral Kummah assassinated in St. Petersburg. General Stoessel court-martialed for surrender at Port Arthur. Forest fires in Wisconsin and Michigan. Inauguration of the Simplon Tunnel. W. H. Stuart, Ameri-

can Consul at Batoum, Russia, assassinated. Insurrection against Japan breaks out in Korea. Revolutionists invade Guatemala. King Alfonso of Spain marries Princess Ena of Battenberg, and bomb thrown at the wedding kills many people.] Marriage of the King of Spain.

ATTEMPTED ASSASSINATION OF ALFONSO OF SPAIN

(A.D. 1906)

A SPANISH SCHOOL-GIRL'S STORY

I WAS the only girl in our college who had an invitation to see the procession from such a good position as the Calle Mayor, and I thought I was very lucky to get it. It was a friend of my mother's who took me, and she told me she was to have a balcony in a flat which a friend of hers had rented for the day. When we got to the Calle Mayor, although it was only 7 a. m., we thought we should have to stay in the street, for there was such a crowd we felt as if we could never push through. But one after another made a little way for us, and then a nice, kind soldier encouraged us and helped us, and at last we got to the door of No. 88. It was barricaded with planks of wood to prevent people getting into the house, and only had a little space left open at the bottom. So we had to go down on our hands and knees to get under the planks. If we had stayed there outside we should have been killed. The soldier who was so nice to us was killed. The bomb fell quite close to him, and that was where we had made

The crowded streets.

up our minds to stand, if he had not helped us to get in.

We had to go to the top of the house, and the flat was divided into four little rooms, each with its own balcony. The lady I was with went into the end one which was the largest with her grown-up friends, and I went into the next with two other girls, both smaller than myself. There was no one else in the room with us. When we first went in, one of the ladies in the end room was holding a bunch of flowers to throw when the King came, but her husband took it away from her, because it was forbidden to throw flowers. Wasn't it lucky for her, or else they would have taken her to prison on account of throwing flowers?

We were very pleased with our place, for there was room for all three of us on the balcony, and as we had to wait a great many hours, of course we looked at everything. Down below there was a dear little baby-boy, about four years old, beautifully dressed—such a darling! We never got tired of looking at him, and his mother was pretty, too. On another balcony, exactly below ours, there were some gentlemen. They were very lively, and before the procession came one climbed up and sat with his legs dangling over—at least so it seemed to us—but we didn't notice him very much then, for we were all getting very excited and impatient to see the Queen.

On the balcony.

A strange gentleman.

The next balcony to ours on the top floor had only one gentleman in it. We noticed him a great deal. First we thought it was so extremely odd of him to keep the whole balcony to himself, when the one beyond was so full of ladies, and he could so easily have invited some of them to come to his room. Then, as we looked at him, expecting to see some of his friends arrive, we all noticed that he held his hands in a very funny way, always below the top of the balcony, and generally behind his back. But as the balcony was decorated, we could not see his hands, even when he had them in front of him. So we decided that he must have got a bunch of flowers to throw, in spite of the prohibition, and that he was afraid of having them seen. We had to wait a very long time, for we got there at seven and the procession didn't come till eleven or later, so we had plenty of time to look about, and as we thought he was a very odd person, we kept on noticing him. The ladies in the other balconies must have seen him, too, of course, but they were all talking a great deal, so perhaps that was why he did not attract their attention as much as ours. We were laughing at him to ourselves about hiding his flowers so carefully and looking so funny with his hands always out of sight.

At last the procession began to come by, and of course we forgot all about the man in the next balcony. We didn't know who most of

the people in the carriages were, but we saw the Prince and Princess of Wales, and the Queen Mother, and the mother of the bride, though we could hardly look at them, we were all thinking so much of the Queen.

Then the shouting got louder and louder and everybody was so gay and happy, and we were staring hard at the King and Queen, when it seemed to me something dark fell just alongside of me, and there was an awful noise and all at once everything was hidden in clouds. The bomb falls.

I thought to myself "It is the end of the world. God waited for the King to come, and this is the end of the world."

I don't know how long it was before I guessed what had really happened. Everything seemed quite silent for a long time. It was so strange to hear a great silence suddenly in the midst of all that shouting. Then I heard a mother cry out *"Mi hijo, mi hijo!"* (My son! my son!), and other cries of pain. And then the King called out very loud. I think he called first: "Bring up the empty carriage" (*coche de respeto*), but I am not sure now, for I also heard him say equally loud: "We are not hurt," and I cannot remember which he said first, I only remember how clear and brave his voice sounded.

Then the smoke cleared away, and I saw the King helping the Queen out of the carriage. She looked rather white and fright-

ened, but she was not crying nor fainting; she was holding her dress up all in a heap, and two gentlemen were helping her to hold it, the train was so very long. I saw some spots of blood on it. I was told afterwards that it was the blood of one of the grooms who was killed close to the steps of the carriage. I saw him lying dead by the steps in a heap.

I just looked down as long as I could, for I did so want to see the new Queen, but I saw such dreadful sights that I could not stop at the balcony. I came inside and I was deadly sick. One of the little girls with me fainted, and the other had her face covered with blood from the broken glass in our windows.

We were all very frightened, but in a minute or two we felt a little better, and we went back to the balcony again to look at the Queen. The King was giving orders to everybody, it seemed to me. I never saw any one so brave as he was. When the Queen stepped down from the carriage he took her hands and presented her to the people, and I think it was then that he said: "We are not hurt!" I can't remember that part clearly.

Bravery of the King.

Nobody came into the room for some time. I think we were forgotten. Some of the ladies fainted, and my friend was taken ill from the fright. I shall never forget what dreadful sights we saw when we looked out again. Nobody noticed at first that the assassin had disappeared from his balcony. He must have

slipped downstairs and scrambled out under the planks at the street door, and there were Civil Guards inside the door, so it seems strange he was not caught. But I think the Civil Guards had run out to help, and I don't think any one knew just at first exactly where the bomb fell from. Perhaps they did not even guess that it was thrown from a window till they saw all the poor people dead and wounded in the balconies of our house.

The pretty baby-boy's face was all torn away, and that young man I told you of who had climbed up on the rails of his balcony just under ours, was hanging there quite dead, head downward. And the soldier who helped us to get through the crowd was dead.

We were all locked into the house a short time after the explosion. It was such a long, terrible day. We had nothing to eat. It was an unfurnished flat, and no one had expected to stay much after lunch time. But if there had been food we could not have eaten it, we felt so sick and ill.

About four o'clock Don Carlos (the King's widowed brother-in-law) came to the house to ask questions. All along the street we heard them shouting *"Viva* the brave Prince!" The people were very pleased that he was not afraid of them. They are all very fond of Don Carlos. When I heard he was coming I felt frightened, and said: "I have never spoken to a Prince!" How ought I to answer

Popularity of Don Carlos.

his questions?" But he never questioned us after all. He said we should be excused as we were so young.

I forgot to tell you that as soon as the King called out: "We are not hurt," there was such a roar of shouting that the cries and groans of those injured were drowned. They shouted, *"Viva los Reyes!"* "Cowards! Cowards! Kill the assassins!" and "Long live the brave King!" and altogether made a tremendous noise. Close to the carriage I saw some strange soldiers, and those were the English Lancers, somebody said afterward, but I didn't think of anything but the Queen at first. The King seemed to be trying to keep the crowd quiet—he was giving orders. Everybody crowded round, for they were afraid the Queen was hurt. They were quickly covering the faces of the dead with pocket-handkerchiefs when she got out of the carriage. I saw the coachman fall off the box. He was not wounded, but I was told afterward that he died from the shock. It was a dreadful sight—all those beautiful horses streaming with blood and the poor grooms wounded or killed.

Horrible scenes.

It was nine o'clock at night before we were let out of the house. When I got back to school, the mistresses knew what had happened to me almost before I began to speak. They told me afterward that I looked ghastly, yellow-white. They just let me write a post-

card to my mother to tell her I had seen the procession but I did not tell her I had been in that house. Then they told me to go straight to bed. I hadn't cried or screamed or done anything silly till then, but I felt that I couldn't go to bed, and I began to scream out loud, I couldn't help it. I found myself shivering with cold and shrieking: "I can't stay alone! The dead soldiers are here! I see them all round me!"

So the mistresses sent one of my schoolfellows to sleep with me, and they told me not to talk of what I had seen. But I could not help thinking of it. I was three days in bed. I could not move, nor eat, nor sleep, and directly I shut my eyes I saw it all over again. The girls took turns in staying with me. I still dream about it very often. I shall never forget the King's wedding.

[*Lusitania* launched. Evangelical Alliance celebrates its Diamond Jubilee in London. British win victory over Zulus. Cobbler Marakesh of Morocco, murderer of 36 women, walled-up alive. Wellman Arctic expedition sails from Antwerp. Roosevelt signs Statehood bills. President Sakay, Ladrone leader in the Philippines, surrenders.

British Victory over Zulus.

HAAKON VII., KING OF NORWAY

(A.D. 1906)

HROLF WISBY

ONCE more the ancient throne of Norway in the Drontheim Cathedral, vacant for more than five hundred years, will hold a sovereign. Prince Charles of Denmark has accepted the Storthing's proffer of the crown, and the coronation will take place, probably on New Year's Day, 1906.

Who is this man Charles, what can he do, and why was he chosen by a parliament which has always shown republican tendencies?

Characteristics and ancestry of the King.

Prince Charles is a young man of thirty-three summers, of gentlemanly appearance, in excellent health, and of a very easy-going, liberal turn of mind. He is by nature well fitted to rule over the stubborn Norsemen, who do not mind the harness so long as they don't feel the whip. The very thing that is going to make Charles popular in Norway before he shows his face there, is the fact that he, as a typical "sailor prince," is considered a proper and natural connecting link between the old Viking spirit of feudal Norway and her present-day peaceful love of the sea. Another circumstance in favor of Charles is

that he understands the language of the Norwegian people, and their traditions and history are part of those of his own country, Denmark, under the dominion of which Norway remained for four centuries.

Charles is the second son of the Crown Prince of Denmark, whom he strongly resembles and this also counts in his favor, for the Crown Prince is a scion of the House of Sonderburg-Glücksburg, whereas the Crown Princess is a daughter of the Bernadotte, King Carl XV. of Sweden—and the Bernadottes were never popular in Norway.

Charles married, about a decade ago, the second and favorite daughter of the King of England, the Princess Maud Alexandra, with whom he fell in love at the Danish court. Through this marriage he brings with him to the Norse people a practical guarantee that the enormous Norwegian coast line will never lack the protection of the British fleet in time of trouble. Strategically considered, Charles is a very important acquisition for Norway. Diplomatically his family relationship with foreign courts is a political asset by which Norway is destined to benefit in more ways than one. Here is the family roster of Prince Charles, the future King Haakon VII. of Norway: The new Queen.

Father and Mother.—Crown Prince and Crown Princess of Denmark.

Grandfather.—King Christian of Denmark.

Uncles.—King of England, King of Greece, Duke of Cumberland, Prince Waldemar of Denmark.

Aunts.—Queen Mother of England, Empress-Dowager of Russia, Queen of Greece, Princess Marie d'Orléans.

Cousins.—Czar of Russia, Prince of Wales, Prince George of Greece, Prince Aage of Denmark.

Brothers-in-Law.—Prince Frederick of Schaumburg-Lippe (Germany), Prince Charles of Sweden.

Brothers and Sisters.—Prince Christian of Denmark, heir-apparent; the Princes Harald and Gustav of Denmark; the Princesses Ingeborg, Thyra, and Dagmar.

The King's relatives.

It is a peculiar coincidence that the first child in the family of the Danish Crown Prince and the first child in King Edward's family to wear the sceptre as Sovereign, is a second and not a first child, and both owe their success to the same fortunate accident—namely, Norway's breach with Sweden.

The official titles of King and Queen will be as follows in Norwegian:

Kong Haakon den Syvende af Norge (King Haakon the Seventh of Norway.)

Dronning Maud af Norge og Prinsesse af Storbrittanien og Irland (Queen Maud of Norway and Princess of Great Britain and Ireland).

Charles loses his baptismal name and his

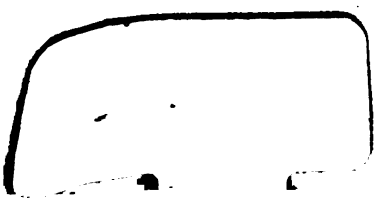
hereditary title as a Prince of Denmark, whereas Maud retains both and gets a queenship in the bargain. This is the effect of an old Court ordinance in England, which prescribes that a princess of Great Britain and Ireland in marrying shall have the right to append this most envied of all English feminine titles to whatever name or title she may receive by marriage.

The Queen-to-be of Norway is a pretty, stately girl who seems to be quite devoted to her husband, though it was said before her marriage that she was in love with a British noble who did not rank high enough to marry her. She has been reared almost exclusively in the atmosphere of Court life, and takes only a perfunctory interest in the out-door life, which her husband has made his by preference. Very likely the fresh breezes of Norway will have a salubrious effect on Princess Maud. The couple have a two-year old son, Alexander, who will be the Crown Prince of Norway, and who as King will probably wear the title of Harald IV., as the Haralds and Haakons, it has been decided, will hereafter alternate on Norway's Court roster.

Alexander, Crown Prince of Norway.

[President Amador of Panama re-elected. H. K. Thaw shoots Stanford White in Madison Square Roof Garden. Congress passes railroad rate regulation, meat inspection, pure food, and Lake Erie and Ohio River ship

canal franchise acts. English boat train derailed at Salisbury (27 Americans killed). French Parliament vindicates Alfred Dreyfus to the army and duel follows. Honduras declares war against Guatemala. Earthquake shocks in Rio Grande Valley. Gen. Stoessel condemned to death. Central American Peace Treaty signed on the U. S. Cruiser *Marblehead*. Czar dissolves Duma and proclaims martial law in St. Petersburg. Fire in Leeds (England). Stolypin becomes Russian premier. Pan-American Conference convenes in Rio Janeiro.]

Czar dissolves Duma.

END OF VOLUME EIGHT